

Svadhyaaya

2023-24



**GANDHI INSTITUTE
FOR EDUCATION AND TECHNOLOGY**

Accredited by NAAC (A+) and NBA (CSE)

Baniatangi, Bhubaneswar, Khurda | www.giet.edu.in

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Vision

To be a global leader in providing Technical Education, Research and Innovation.

Mission

- To bring out efficient engineers for global requirements by imparting quality education.
- To explore, create and develop innovations in various aspects of engineering through industries and institutions.
- To emphasize on practical skills and socially relevant technology.



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- M/s. Radhakrishna IT Solutions Pvt. Ltd.
- Inoxcorp India Pvt. Ltd.





EDITORIAL *Message*



I am elated to bring to you this edition of our college annual magazine, to express our views, feelings and emotions, to enlighten our hearts and strengthen our bond and lead towards the advancement and enhancement of our college annual magazine SVADHYAYA. I want to thank and congratulate my fellow mates, students who have actively participated and contributed in the successfully bringing out of our college annual magazine SVADHYAYA. I wish you happy reading.

Dr. Hrusikesh Nath
Dept. of BSH
PIC, Editorial Board





Message from the **CHAIRMAN**

It is my great pleasure to greet you on the publication of our College Annual Magazine SVADHYAYA. It has been a humbling experience to see how GIET and GIETians have risen to each challenge and have been able to excel in all spheres. We have seen how encouraging it has been to witness many remarkable instances of courage, integrity and responsibility since the inception. I sincerely thank all the members of the faculty, staff and students of the GIET family who have co-operated with the vision and goals that we had set before us. May we continue to work together and give our very best even in the days to come!

I extend my heartfelt congratulations to the Magazine Committee for all their efforts.

Best wishes to SVADHYAYA and the GIETians.

A handwritten signature in blue ink, appearing to be 'Satya Prakash Panda'.

Prof. (Dr) Satya Prakash Panda,
Chairman



Message from the **VICE CHAIRMAN**

I am extremely happy that our college Gandhi Institute for Engineering and Technology, Baniatangi, Khorda is bringing up it's annual college magazine SVADHYAYA for the academic year 2023-24. Writing is deeply therapeutic, in expressing our thoughts, we define life, it makes us reflect on the past and form new ideas. As we march ahead inspiring our creative minds of GIETians, may we create fertile ground for a wholesome better world.

This magazine will definitely provide a platform to the students, faculty members and staff members to showcase their talents and achievements. I extend my hearty congratulations and appreciate the efforts of the Editorial board in bringing up SVADHYAYA.

My best wishes to the students for their constant endeavor for a bright future.

Prof.(Dr) Jyoti Prakash Mishra,
Vice-Chairman



Message from the **SECRETARY**

The college magazine SVADHYAYA is a forum which could aptly be used for recording events, fond memories and showcasing creativeness. This magazine has made an earnest attempt in that direction and brought out certain aspects of our college.

I congratulate all students, faculty and staff members of our college to bringing up SVADHYAYA with their tireless and sincere effort and participation.

May SVADHYAYA serve as a source of learning and inspire the creative minds for a better world.

A handwritten signature in black ink, appearing to read 'Snigdha'.

Prof. Snigdharani Panda,
Secretary



Message from the **PRINCIPAL**

It gives me an immense pleasure to note that our college GIET, Baniatangi is bringing out the annual magazine SVADHYAYA for the academic year 2023-24.

Learning is a continuous process from the minute we are born, until we die. GIET, Baniatangi provides a platform for every student to develop his/her learning skills through SVADHYAYA.

Publishing a magazine is indeed a tedious and herculean task. In recent years, when our students are concerned more about their academic excellence, they have to be coaxed, persuaded and encouraged to exhibit their writing talents. The articles contributed for the college magazine has shown GIETian's intellectual insight and their excellent command on language.

You all must aim always high, as high as the sky to be good citizens and leaders of our beloved country.

My best wishes to SVADHYAYA.

A handwritten signature in green ink, appearing to read 'Jena', is placed above the printed name of the principal.

Prof. (Dr.) Jibanananda Jena,
Principal



Message from the
PRINCIPAL
(Diploma Wing)

The annual college magazine SVADHYAYA is a platform that provides the opportunity to showcase one's creativity, artistic skills and writing skills alongside the academic and co-curriculum. It is a mirror of the College, a historical document of the growth of our college.

Undoubtedly we progress by leaps and bounds in all spheres of life towards a brighter future. My best wishes to the editorial.

May SVADHYAYA be a grand success.

A handwritten signature in blue ink, appearing to read 'Bikash'.

Prof. Bikash Chandra Pattanaik,
Principal (Diploma Wing)



ନିରବ ପଥକ

ଦଗ୍ଧ ମରୁବାଲିରେ ମୁଁ ଅଶାନ୍ତ
ନିରବ ପଥକଟିଏ
ଆଶାହୀନ ବିଶ୍ୱାସଶୂନ୍ୟ ଏକାନ୍ତ
ବାଟୋଇକୁ ପଟାରରେ କିଏ ॥

ଝଡ଼ତାର ଅନ୍ଧାରକୁ ପାଖକୁ ଦେଖି
ଝରାଇଛି କେତେ ଲୁହ
ଅସହ୍ୟ ଯନ୍ତ୍ରଣାର ତାଣ୍ଡବ ପାଇ
ଅନ୍ତରରେ ଆସେ କୋହ ॥

କାହାକୁ କହିବି ସଂଘର୍ଷର ଯାତ୍ରା
ଶୁଷ୍କ ଡୂଣ ମୁଁ ଆଜି
ନିଡ଼ ଭୁଲି ହୋଇଅଛି ଯାଯାବର
ବାଆଁରା ପକ୍ଷୀ ଟିଏ ସାଜି ॥

ସୁଖ ଓ ଶାନ୍ତିର ସପନ ଦେଖିବା
ହୋଇଛି ସଦା ବାରଣ
ଅବିଶ୍ୱାସ ଛଳନାର ବହିରେ ଜଳି
ମୁଁ ନୁହେଁ କାହାର କାରଣ ॥

ଅତୀତର ସ୍ମୃତି ଗଦାକୁ ଆଡେଇ
ବିରହ ବେଦନା ସାଧେ
ବଞ୍ଚିବା ଶିଖେ ଗ୍ରହଣ ଚନ୍ଦ୍ର ପରି
ଉଆଁସୀ ଜହ୍ନ ପାଶେ ॥

ଧିରେ ଧିରେ ଗଗନ ପ୍ରାଙ୍ଗଣେ
ଅବସ ଶରୀରକୁ ନେଇ
ପଞ୍ଚଭୂତେ ମିଶିଯିବି ପ୍ରଭୁ ଚରଣେ
ଆଲୋଡ଼ା ହେଦଦେଇ ॥

- ରଚନା -

ସିଦ୍ଧାନ୍ତ କୁମାର ବଳବନ୍ତରାୟ
ଅଧ୍ୟାପକ : କମ୍ପ୍ୟୁଟର ସାଇନ୍ସ ବିଭାଗ



ପ୍ରକୃତି

ଚାନ୍ଦିନୀ ରାତ୍ରୀର ସମୀର ସ୍ରୋତରେ
ଗଙ୍ଗାସିଂହାର ନୃତ୍ୟ
ପେଟା ବାଦୁଡ଼ିଏ ଦର୍ଶକ ସାଜନ୍ତି
ସୁନ୍ଦରୀ ସାଜିଛି ଭୃତ୍ୟା ।

ସୁନ୍ଦରୀ ମନର କୋଣ ଅନୁକୋଣେ
ଚନ୍ଦ୍ରଲୋକେ କେତେ ସ୍ୱପ୍ନ...
ସ୍ମୃତି ସୃଷ୍ଟି ହୁଏ ହୃଦୟ ମଧ୍ୟରେ
ଦେଖି ହସୁଥାଏ ଜହ୍ନା ॥

ତାରାକା ପୁଞ୍ଜର ଏକ୍ୟ ପ୍ରଦର୍ଶନୀ
ନାନା ଆକୃତିରେ ଭଜା...
ହୀରା ବର୍ଷା ପୁଣି ଆମର ଗର୍ଭରୁ
ଘାସ ଗାଳିଚାରେ ସଜା

ଖଦ୍ୟୋତ ସଭାରେ ଆଲୋକ ବର୍ଷଣ
ଅନ୍ଧାର ମଧ୍ୟରେ ମୁକ୍ତା
ମନ ଆକାଶରେ ସ୍ୱପ୍ନର ବାଦଲ
ସ୍ୱପ୍ନ ଖୋଜୁଥାଏ ସଭା ॥

ସ୍ୱପ୍ନ ବାଦଲ କି ବରସିବ ଦିନେ
ସାକାର ହୋଇବ ସ୍ୱପ୍ନ..
ପ୍ରକୃତି କୋଳରେ ପୁଣି ସୋଇଯିବ
ଜୀବନ ହୋଇବ ଧନ୍ୟ ॥

- ରଚନା -

ପ୍ରିୟଙ୍କା ରାଉତ
କଂପ୍ୟୁଟର ସାଇନ୍ସ



ମା'

ଆଜି ଏତେ ଦୁରେ,
ତୋ କଥା ଭାବିଲେ
ଲୁହ ଜମିଯାଏ ଆଖି କଡେ ।
ସବୁ ବେଳେ ତୋର, ପଣତ କାନିର
ଆତୁଆଲେ କାହିଁ ମନେ ପଡେ ॥

ବୋଉ ବୋଉ କହି କୋଳରେ
ତୋହର କେତେ ମୁଁ କରିଛି ଅଳି ॥
ଯେତେ ଭୁଲ୍ କଲେ ଦିନଟିଏ
ଦେଇ ନାହିଁ ଜମା ଗାଳି ॥

ଖୁଷି ପଡିଲେ ମୁଁ ଆହା ବୋଲି କହି
ନେଇଛୁ କୋଳରେ ତୋଳି ।
ଚଉଁରାର ମାଟି ମଥାରେ ମୋହର
ଦେଇଛୁ କେତେ ତୁ ବୋଲି ॥

ଜର ହୋଇଗଲେ ଦେବା ଦେବୀ ଠାରେ
କେତେ ମାନସିକ କରୁ ।
ଦାଣ୍ଡ ଦୁଆରେ ତୁ ଚାହିଁ ରହିଥାଉ
ବାହାରି ଗଲେ ମୁଁ ଘରୁ ॥

ତୋ କୋଳ ଛାଡିବା ପରେ ମୁଁ ଦେଖିଲି
ହସ ଲୁହର ଏ ସଂସାରକୁ ।
ତୋ ହାତ ଛାଡିବା ପରେ ମୁଁ ବୁଝିଲି
ସତ ମିଛ ଏ ଦୁନିଆକୁ ॥

ତୋ ତାଳ ଶୁଣିବା ପରେ ହିଁ ବୁଝିଲି
ସେ ଶବ୍ଦ ମଧୁର ମଧୁଠାରୁ ।
ତୋ ଛୁଆଁ ପାଇବା ପରେ ହିଁ ଭାବିଲି
କୋମଳ ସ୍ବର୍ଗ ସେ ଫୁଲଠାରୁ ॥

ତୋ କାନି ଧରିବା ପରେ ହିଁ ଜାଣିଲି
କେତେ ମହତ ସେ ପଣତର ।
ତୋ ପାଦଛୁଇଁବା ପରେ ହିଁ ଲାଗିଲା
ଚଳନ୍ତି ଠାକୁର ତୁ ମୋର ॥

ଆଜି କାହିଁ ମୋର ଭାରି ମନେ ପଡୁଅଛି
ବୋଉଲୋ, ତୋହରି କଥା ।
ଲାଗୁଛି ଯେମିତି ମୋ ପାଖରେ ବସି
ଆଉଁଶି ଦେଉଛୁ ମଥା ॥

ତୋ ବିନା ଜିଇବା ମରିବା ସମାନ
ଅର୍ଥ ନାହିଁ କିଛି ଜୀବନର ।
ତୋ କଥା ଲେଖିବା ପରେ ହିଁ ଲାଗୁଛି
ସରିଗଲା ସବୁ ଶବ୍ଦ ମୋର ॥

- ରଚନା -

ଶ୍ରୀ ଇଶ୍ବର ଚନ୍ଦ୍ର ପୃଷ୍ଠି
କମ୍ପ୍ୟୁଟର ଅପରେଟର,
ଜି.ଆଇ.ଇ.ଟି, ବଣିଆଟାଙ୍ଗି





ଆହେ ଚକା ଆଖୁ

ଯେତେ ଥର ଯାଏ ମୁଁ ଶ୍ରୀମନ୍ଦିର
ଭାବେ କହିବି ନିଶ୍ଚୟ ଦୁଃଖ ମୋ ମନର
ସଂହ ଦୁଆରୁ ଯେବେ ଦିଶେ ତୁମ ଚକାନୟନ
ମନୁ ଅପସରି ଯାଏ ସବୁ ଦୁଃଖ ଅଭିମାନ....

ଦେହ ଦେଉଳରୁ ଆତ୍ମା ଦିଏ ଏକ ଡାକ
ତୁମ ବିନା ମୁଁ କିଏ, ସବୁ ତ ଅଳିକ...
ଆଖୁ ସାଥେ ତୁମ ମିଶିଗଲେ ଆଖୁ
କିଛି ରହେ ନାହିଁ ବାକି....

ସେ ଚକାଆଖୁକୁ ପାଟି ଖୋଲି କିଛି
ମାଗିବି ଆଉ କାହିଁକି ...
ସଂସାର ସାଗରେ ଜୀବନ ନୌକା
ନୌକାର ମାଝୀ ତୁମେ ...
ବଞ୍ଚିବାର ଶେଷ ଭରସା ଟିକକ
ଆହେ ଚକାଆଖୁ ସମର୍ପିଲି ତୁମପାଖେ...

- ରଚନା -

ମୀରା ଦାଶ

ଅଧ୍ୟାପିକା, କମ୍ପ୍ୟୁଟର ସାଇନ୍ସ



ପିଲାଦିନ

ଶିଶୁଟିଏ ହୋଇ ରହିଥାନ୍ତି କି
ସାରା ଜୀବନକୁ ମୁହିଁ
ରାଗ ରୁଷା ଆଉ ଅଭିମାନ ମତେ
କେବେ ବି ଛୁଅନ୍ତା ନାହିଁ।

ସବୁ ବେଳେ ମୋର ଓଠେ ହସ ଥାଇ
ଖୁଲି ଖୁଲି ହସୁ ଥାନ୍ତି
ଟିକି ଟିକି ଆଶା ପୂରଣ ହୋଇଲେ
ଖୁସି କେତେ ହଉଥାନ୍ତି ॥

ନ ଥିଲା ସେବେ ପାଇବାର ଆଶା
ନ ଥିଲା ହଜିବା ଦୁଃଖ
ଯାହା ମିଳୁଥିଲା ଖୁସିରେ ରଖି
ପାଉଥିଲି କେତେ ସୁଖ ॥

ଟିକି ଟିକି ଓଠେ ଡାକୁଥିଲି ମାଆ
ନେଉଥିଲା ମାଆ କୋଳେ
ଟିକି ଟିକି ହାତେ ବାଲି ଘର କରି
ଖେଳୁଥିଲି ସାଙ୍ଗମେଳେ ॥

ଶୀତ ଦିନେ କେତେ ଲାଗୁଥିଲା ମଜା
ବସିବାକୁ ନିଆଁ ପାଖେ
ରାତି ହେଉଗଲେ ମାଆରି କୋଳରେ
ଶେଇବାକୁ ମଜା ଲାଗେ

- ରଚନା -

ରଞ୍ଜନ କୁମାର ମହନ୍ତ

ବି.ଟେକ୍ ପ୍ରଥମ ବର୍ଷ



ସ୍ୱପ୍ନ



କାରା ବନ୍ଧ ଚଢ଼େଇ ମୁଁ
ମୁକ୍ତ ଆକାଶେ ସ୍ୱପ୍ନ
ଦେଖିବାକୁ ପୁଣି ନୂତନ ଆଲୋକ
ମୁକ୍ତ ଅମ୍ଭରେ ଜନ୍ମ

ଅଭିଶପ୍ତ ଅହଲ୍ୟା ମୁଁ
ଜାଣି ନାହିଁ ରଘୁ ଚନ୍ଦନ
କେବେ ଦେବେ କାରା ସ୍ୱର୍ଗ
ଧରା ଧାମ ଦେଖିବି ମୁଁ

ସତ୍ୟ ହୋଇବ କି ସ୍ୱପ୍ନ ମୋହର
ପୁଲକିତ ହେବି ସତେ
ଭାବନା ରାଇଜେ ଉତ୍ସବ ପାଳିତ
ଜୀବନ ନଦୀର ସ୍ରୋତେ

ଜିଜ୍ଞାସା ସୁଖ କି ପ୍ରପତି ହୋଇବ
କୁତାର୍ଥ ହୋଇବି ସେ କାଳେ
କେବେ ସେ ସୁଦିନ ସତେ କି ଆସିବ
ଅପେକ୍ଷାର ଅନ୍ତରାଳେ ।

- ରଚନା -

ପ୍ରିୟଙ୍କା ରାଉତ

କମ୍ପ୍ୟୁଟର ସାଇନ୍ସ (୨ୟ ବର୍ଷ)



ସଫଳତା

ଜୀବନ ସହରେ ଅନେକ ସଡ଼କ
ସଫଳ ରାହାକୁ ଖୋଜେ
ସଫଳତା କିନ୍ତୁ ପରିଶ୍ରମ ଲୋଡ଼େ
ମନେ ଏକାଗ୍ରତା ହଜେ ॥

ଲକ୍ଷ୍ୟ ପୁରଣକୁ ପ୍ରତ୍ୟେକ ଆଗ୍ରହୀ
ପରିଶ୍ରମ ପାଇଁ ଘୃଣା
ଦିବା ସ୍ୱପ୍ନ ପରି ଅନେକ କଳ୍ପନା
ଅଳସ୍ୟରେ ବାଟବଣା ॥

ସଞ୍ଚିତ ସ୍ୱପ୍ନରେ କେତେ ଅନୁଭବ
ସିଦ୍ଧି ପଥେ କେତେ ବାଧା
କ୍ଷଣସ୍ଥାୟୀ ଏହି କଠିନ ମୁହୂର୍ତ୍ତ
ଜୀବକୁ ହରିବ ବ୍ୟଥା ॥

ଶେଷହେବ ଯେବେ ମନର ଦୁର୍ବଳତା
ପାଇଯିବ ସେବେ ଜୀବନରେ ସଫଳତା ॥

- ରଚନା -

ପ୍ରିୟଙ୍କା ରାଉତ

କମ୍ପ୍ୟୁଟର ସାଇନ୍ସ (୨ୟ ବର୍ଷ)



ଆଗନ୍ତୁକ ବସନ୍ତ

ଅକସୀ ଆଖିର ଲୁହର ରଙ୍ଗରେ
ବିଦାୟ ନେଇଛି ଶୀତ
ପତ୍ରଝଡ଼ା ବୃକ୍ଷ ନବ ପଲ୍ଲବରେ
ହେଉଛନ୍ତି ଉନ୍ମାଦିତ ॥

ସୁନାଳ ଅମ୍ବର ସୁସଜ୍ଜିତ ଧରା
ସଜେଇ ହୋଇଛି ଆଜି
ବସନ୍ତ ସ୍ବର୍ଗରେ ବସୁନ୍ଧରା ଗାଏ
ପାର୍ବଣର ମଧୁ ଗୀତି ॥

ଶ୍ୟାମଳ କାନନ ସୁରଭି କୁସୁମ
ମଧୁପର ମଧୁ ଗୁଞ୍ଜନ
ପିକ କୁହୁତାନ ପଞ୍ଚମ ସ୍ବରରେ
ପ୍ରକମ୍ପିତ ଆମ୍ରବନ ॥

ବଉଳ ବାସରେ ପ୍ରମତ୍ତ ଭ୍ରମର
ଉଡ଼ି ବୁଲେ ଏଣେତେଣେ
ପଳାଶ ଅଶୋକ ମାଳତୀ ଗୋଲପ
ହସି ଉଠେ ଧରାତଳେ ॥

କନକ କିରଣେ ହଳଦୀ ବସନ୍ତ
ଆନନ୍ଦ ଚିତ୍ତରେ ବୁଲେ
ମୃଦମଳୟର କୁହୁକ ପରଶେ
ମନ ପ୍ରଫୁଲ୍ଲିତ ଲାଗେ ॥

ପଚାରୀ ଆକାଶେ ବାଳ ପ୍ରଭାକର
ମିଠା ହସ ଧାରେ ଧାରେ
ଉଡ଼ା ଆସେ ନୂଆ ଓଡ଼ିଶା ପକାଇ
ମୃଦମୟ ସମୀରଣେ ॥

ଦୋଳ ଯାତ ଲାଗି ସଜେଇ ହେଲାଣି
ସବୁରି ପରାଣେ ହସ
ବିମାନରେ ଯିବେ ରାଧାକୃଷ୍ଣ ପୁଣି
ଖେଳିବେ ଅବିର ରଙ୍ଗ ॥

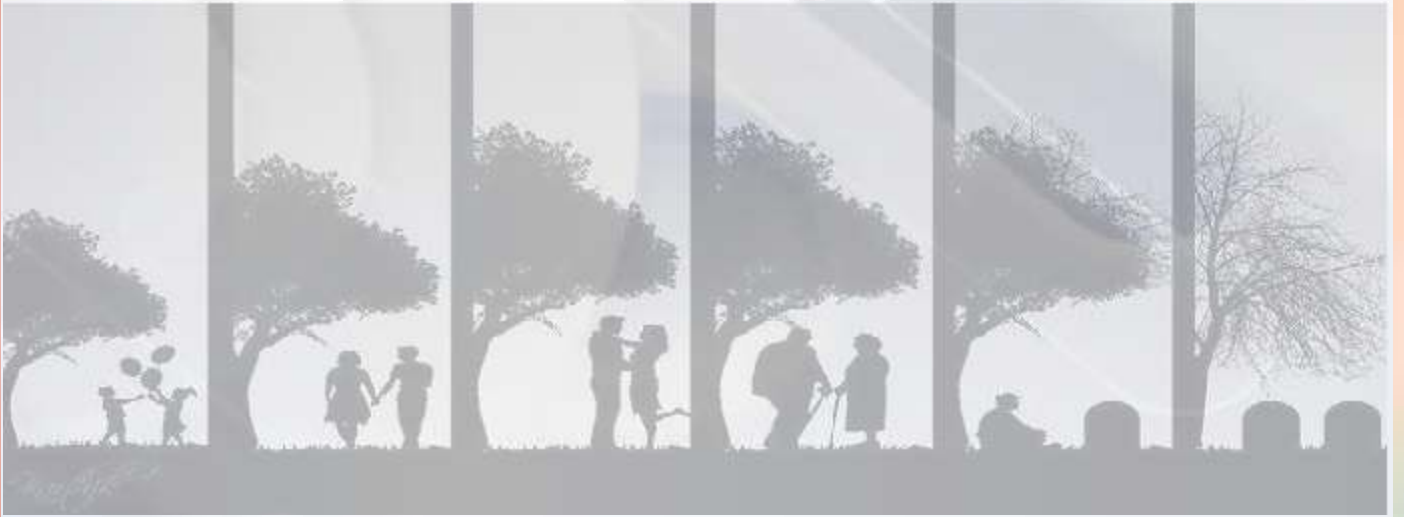
କବି କବ୍ଧନାର ଅଥଳ ଅମୋଧି
ବସନ୍ତର ଦିବ୍ୟ ରୂପ
କଳାକାରର କାନଭାସରେ ସେ
ନା ନା ରଙ୍ଗ ବର୍ଣ୍ଣବୋଧ ॥

- ରଚନା -

କିରଣ ସ୍ବାଇଁ

ବି.ଟେକ୍ ସି.ଏସ୍.ସି (୪ର୍ଥ ବର୍ଷ)





ଏଇତ ଜୀବନ

ଜୀବନ କେତେବେଳେ ଧୂଆଁଳିଆ ଆକାଶ ତ
କେବେ ମେଞ୍ଚେ ଖୁସିର ସକାଳ
କେବେ ମେଘଦୂଜା ଆଷାଢ଼ ତ
ପୁଣି କେବେ କୃଷ୍ଣଚୂଡ଼ାର ଚେନାଏ ହସ
ଏଇତ ଜୀବନ
କେତେବେଳେ ଝୁଣ୍ଟିପଡ଼ିବାର କଷ୍ଟ ତ
ପୁଣି କେବେ ବାଟ ସରୁନଥିବାର ଅପେକ୍ଷା
ନା ଲୋଡ଼ାଥାଏ ଏଠି ଭାଗଫଳ ନା ଭାଗଶେଷ
ଜୀବନର ଶେଷ ଛକ
ସେଇ ମଶାଣିର ମୁଠାଏ ପାଉଁଶ

ଏଇ ଦୁନିଆ
ଏଇ ଦୁନିଆର ମଣିଷ ମାନଙ୍କୁ ନିଜର କରିବାକୁ ଯାଇ
କେତେବେଳେ ନିଜକୁ ନିଜଠୁ ପର କରିଦେଲେ
ନିଜ ଇଚ୍ଛା ନିଜ କୃଷି ନିଜର ସବୁତକ ସ୍ବପ୍ନକୁ
ବହୁତ ଦୂରକୁ ଫିଙ୍ଗିଦେଲି
ଅନ୍ୟମାନଙ୍କୁ ଆପଣାର କରିବା ଭିତରେ
କେତେବେଳେ ନିଜଠୁ ଦୂରେଇଗଲି
ଜାଣିପାରିଲିନି ବୁଝିପାରିଲିନି
ସବୁତକ ବୟସ ସବୁତକ ଆୟୁଷ ସରିଗଲା ତେକେବେଳେ

ନିଜେ ନିଜକୁ ବୁଝିବା ପରଠୁ ବାଟ ହୋଇ ପଡ଼ିଯାଇଛି ମୁଁ ଏଠି
କାହିଁ କେବେଠାରୁ ଆଉ କା ପାଦରେ କଷ୍ଟ ନ ଦେବା ପାଇଁ
କାହା ପାଦରେ କଷ୍ଟ ନ ଫୁଟିବା ପାଇଁ
ବାଟୋଇ ଟିଏ ହବା ବଦଳରେ
ବାଟ ହୋଇ ପଡ଼ିରହିଲି
କିଏ କେତେ ଆସିଲେ କିଏ କେତେ ଗଲେ
ହେଲେ ମୁଁ କିନ୍ତୁ ଏକା ରହିଗଲି
ଆଜି ମୁଁ ବୁଝୁଛି
କେହି ଏଠି କାହାର ନୁହେଁ
କେବଳ ନିଜ ଛାଇ ହିଁ ନିଜର

Prof. Siddhant Ku Balabantaray
Dept. of CSE



प्रकृति

प्रकृति की यही है रीति ।
बिन मांगे कितना कुछ देती ।
खोने को अनाज भी देती,
पीने को जल भी है देती ।
कपडों के लिए कपास भी देती,
स्वसन प्रक्रिया वायु से चलती,
वायु भी प्रकृति से मिलती ।
प्रकृति की यही है रीति ।
बिन मांगे कितना कुछ देती ॥

हमसे कभी ये कुछ न कहती ।
बिन मांगे सब कुछ है देती ॥
दिन में सूरज की रोशनी है देती ।
रात में चांदनी शीतलता है देती ॥
बिन बोले यह सर्दी गर्मी बरसात भी सहती ।
बिन मांगे कितना कुछ देती ॥
हम भी दे कुछ योगदान ।
थोड़ी मेहनत थोड़ा श्रमदान ॥
बस थोड़ी सी देखभाल ।
और प्रकृति चलेगी सालो साल ॥
प्रकृति की यही है रीति ।
बिन मांगे कितना कुछ देती ॥

By - Prof. Soni Kumari
EACE Department



समय

समय का कदर करना सीखो दोस्तों,
समय भी क्या खास चीज होता है ।
समय एक बार हात से चला जाए तो,
समय फिर लौट के कभी नहीं आता है ।
समय रहते समय को उपयोग करें क्यों कि,
समय ही है जो हरपाल अपने इशारों पे नाचता है ।

By - Priyanka Rout
B.Tech CSE (2nd year)

बचपन की याद

बचपन की यादें, सुनहरी धूप,
खिलौने की चाह, खुशियों का सूप ।
उड़ते पंख मस्ती की दास्तां
गुडिया की बातें, माँ की लोरियां ।
छुट्टी के दिन, खेलों का संगम,
साथ हो जितनी यादें, वो कम ।
दौड़ते खेलते खुशियां चमकती,
बचपन की यादें दिल को भाती ।
स्कूल की छुट्टियां, दोस्तों की गुफाएं,
बचपन की यादें , हर रोज बढ़ाती ।
अब जब भी याद आती है वो भूली बिसरी बातें
हर रोज नया दिन हो पर बचपन था कुछ खास ।

By -Amisha Kumari
Reg. No. - 2101326032





TEACHER

If you are in search of **God**
then find him in your teacher.

if you are in search of **Treasure**
then find it in the blessing of your teacher.

If you are in search of **Love**
then find it in the punishment of your teacher.

If you are in search of **Peace**
then find in the preaching of your teacher.

If you are in search of **Shelter**
then find it at the feet of your teacher.

If you are in search of **Light**
then find it in the eyes of your teacher.

If you are in search of **Success**
then find it in your respect of your teacher.

If you are in search of **Happiness**
then find it in the teaching of your teacher.

Obey, respect, love and have faith
in your teacher if you are an atheist.

- Mr. Biswa Bhusan Mishra
Accounts Officer,
GIET, Baniatangi



I Miss



The broken road while
on the way to school

The Bell which alarmed
us an increased our heart beat.

The silent prayer under sun,
the small pools on the school
field that wet my shoes.

The sea-saw that inspired my dream
to fly high in the sky.

The water drops falling from the roof of the
school and sparkling with sunlight.

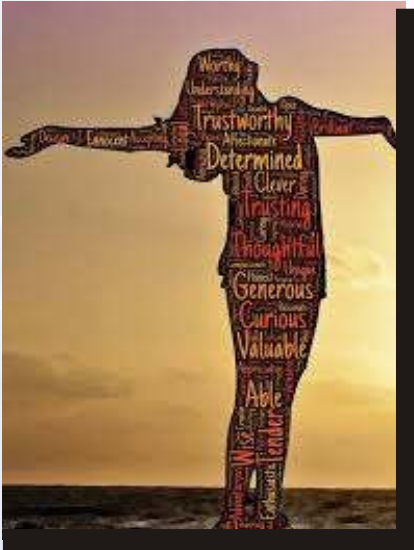
The punishment that embarrassed me
in front of class.

Those friends, who teased me and laughed at me,
I cried when I fell down and a fell bitter
when the laughed and clapped.
I miss the sandy field that absorbed my tears

Today I think those school walls
which supported me to stand up again.

- Mr. Rabindranath Gauda
Sr. Accountant
GIET, Baniatangi





I COME BACK TO YOU

You are black.
The yellow beads on my white nightgown.
The medicament of tranquillity to my diseased heart.
The placebo of my efficiency,
my beanstalk of dreams.

And the "my" in my narcissism.
The white dots in my sight that dances when I glance towards the blank sky.
Roots of the white wild flowers in my backyard,
Eden with venomous gardeners.

Little air vents in the temple of conventionalities resemble your reflection.
A yield of a corrupt nurseryman.
You have the gift of rich history,
you are paradise with dwellers of the dark fiery cavity.

I have trapped the moon behind my window bars,
Now I seek refuge in you.
The queer dandelion seed fancies to come back to the seed head.
Homeland will you still be my asylum,
rest to my aching soul?

I have lost my coven,
You are home to me.

By Prof. Megha Acharya
Department of BSH





RISE LIKE A PHOENIX

When you fail to achieve your goals,
Life gets as dark as coal.
You think you are destined to fail,
Feelings of sorrow and darkness prevail.

There is thunder in the sky,
And what you do is always cry.
Do not worry, as after every darkness there is always sunshine,
It's okay to fail but not to whine.

Storms never last lifetime,
Giving up is an enormous crime.
Keep on moving to achieve your prime,
Act immediately because it's high time.

In the past you might have lost,
But do not worry when your family is the biggest support.
Do not abort your mission in future,
Because you are one God's beautiful and strong creature.

Saswati Pattnaik
Assistant Prof. ECE Department





MADIRAKSHI

My lady in the cherry red shoes
light in the dark days of your dearests.
But I know how deprived of love you are.
It is abundant, it rains
But you held an umbrella of the cherry red
That you painted your lips with.
you extended your hand,
Water drizzled over your tips
And hit the ground
Only to bounce back.
You wonder it's winter
But you smile at the sky.
A void, a void your silence screams.

My lady, my love
You are queer and gentle.
You know the game,
The players too well
That you hesitate to play.
I see your eyes
I see the ocean.
And I see you,
Sometimes drowning yourself
And sometimes gasping for air.
You know how to love too well
And I know your fate.

Your lexicon is your banality
The sign of the old stale freshness.
Those winesoaked eyes,
Look itself in the mirror
And the dew drops of compassion dribbles.
You think everyday to complete
What you started
But you wait,
You wait till it rains.

By Prof. Megha Acharya
Department of BSH





PHOENIX

A little bird, heard the tales of phoenix
Vermilion bird that spread his wings and covered the sky,
Bright scarlet fire that pales the rising sun,
Might of the heavens, that flies above the sun.
Will of the heavens that, he rises from the ash,
He wish to be one, that defies the nature,
He mustered his strength and shoot towards the sun,
He believed he will be the phoenix, as long as he tries,
The higher he flew the harder it became to fly,
He flapped his wings with all his strength,
That higher he will reach if he tries,
And he did, reach the heights never before,
With smile he turned into ashes,
So that he shall rise again.
But did he? Is still a question remains.

By Prof. Devikrishna Das
Department: CSE



I & YOU

Dear "You"
I fill always with in my breath
in my blood
And also in my heart view.

"You" in my brain
Stay always every moment,
Every second
With love of lane.

"You" that not you
Whom I hate
"You" that you
Whom I say "I love you."

"I" who still not stop searching
"You" can find
In my heart and soul
Waiting in my heart door to welcoming

By Mr. Devi Prasad Khadiratna
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THE FACE

Waking up one fine summerday,
I find myself in an unknown world
I turn around, I lookup, I search
I find the same strange world;
Strangers all around, looking down at me,
Some, even judging me
 I am intimidated, I turn around again,
 I walk here and there,
 It didn't change anything
 I am still stuck among the unfriendly beings
I feel trapped;
Some where deep in the valleys of darkness
I wish I could runaway
I yearn to be among people I love,
to stay safe in the comforts of my home
 And then, I see a Face
 A stranger, I hardly know that face
 but there seemed to be something else
 was it kindness ora twinge of smile,
 etched on that Face?
I think it was both; for;
It makes me want to go look for that Face
amidst the crowd of hostile strangers
I walk upto that Face,
slowly but boldly
 The face talks to me, smiling a lot;
 I smile back and answer its questions
 The face grabs my hand and we explore
 the whole strange world out there
I no longer feels cared or sad
I am comforted by the face,
which always stayed by my side
guiding me, like my dad
 I learn a lot from the face;
 though I can't on its soul
 But it seems to understand me and my soul,
 all, in a short span of time
All my fears are washed away;
I feel happy and sated
I am ready to explore any part of the world
with the Face by my side

Alas! One morning it happened
I lost sight of the face
It seems to have disappeared
in a spur of the moment;

I search frantically for the Face
every nook and corner;
Every crevice and a lcoves;
But the Face receded from view,
leaving me all alone
 I am shattered, shocked and at loss for words
 I now see only the impending darkness
 looming all around me
 I feel like I have entered an unknown forest
 with danger lurking here and there;
 And I am all alone; this time there is no Face
 to propel me forward.
Recuperate, I have to
Slowly I gain my strength
I hardly trust any Face now,
For, they may desert meany moment
 I am all I have got;
 With all the broken pieces that I became
 I feel whole all over again
Yet, I can't help but search for the Face
high and low
keeping my ears to the ground
Awaiting the Face to call out my name;
For, that Face, meant the whole world to me
And I still believe it will return one day
And life is worth waiting forth at Face.

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IMPACT OF AI IN THE FIELD OF BIOMEDICAL ENGINEERING



Imagine your loved one suddenly drops and faints. His/her heart stopped. You desperately get him/her CPR until paramedics arrive. When they do, they use a defibrillator to restart your loved one's heart. After a hospital stay to see what exactly caused the cardiac arrest, your loved one has who knows how many extra years of life all thanks to that defibrillator.

Imagine your loved one is diagnosed with kidney failure. The transplants wait list means he/she won't get a new kidney for at least months, if not longer. Your loved one now depends on a dialysis machine to stay alive until a transplant is possible. But if that machine didn't exist, your loved one would die waiting for that transplant.

Imagine your loved one suddenly starts feeling ill. The doctor suspects a cancerous tumor, and thanks to advanced imaging, was able to locate the tumor and remove it before it metastasized. Your loved one was spared from dying of cancer thanks to this early detection.

A biomedical engineer came up with the defibrillator. A biomedical engineer came up with the dialysis machine. A biomedical engineer came up with X ray or other imaging machines.

As important as doctors are to the process of diagnosing and treating patients, they are heavily reliant on the surrounding medical technology to detect, diagnose, and treat diseases. And it's the biomedical engineers behind this technology.

AI has the potential to revolutionize the field of medicine by processing and analyzing large amounts of data to enable accurate diagnosis and

treatment. It can be used in various areas, including medical imaging, drug development, and patient monitoring, to improve patient outcomes. However, there are concerns about the lack of transparency in AI algorithms, the risk of cyber-attacks and system disruption, and the absence of an ethical and legal framework for its use. Despite the benefits of AI, medical professionals, especially doctors, may resist its adoption due to a lack of knowledge and experience, fear of replacement, and uncertainty about the ethical and therapeutic implications of its use. However, it should be noted that AI is meant to complement traditional medicine, not replace it. Addressing these concerns is crucial for the advancement of AI in the medical industry. Ethical guidelines should be established to ensure the safe and transparent use of AI in medicine. Additionally, doctors do not necessarily need programming knowledge to use AI effectively, but they can provide valuable information to data engineers to develop useful and trustworthy AI systems. The future of digital medicine depends on our ability to embrace and utilize the potential of AI while also addressing the challenges that arise. By collaborating and working towards a common goal, we can ensure that AI is used safely and effectively to improve patient outcomes and advance medical research.

DR.AMITA RANI DAS
HOD ECE



ADAPTING TECHNICAL EDUCATION TO THE CHALLENGES OF COVID-19



Every element of society has faced hitherto unheard-of difficulties as a result of the COVID-19 pandemic, and technical education is no exception. Teachers and students have had to quickly adjust to remote learning environments and manage the intricacies of online education as a result of schools and institutions being compelled to close their doors in order to stop the virus from spreading. This article examines how COVID-19 has affected technical education and the creative ways that the field has responded to maintain learning continuity.

Transition to Online Learning

Virtual classrooms and online learning platforms replaced traditional classroom-based instruction as lockdown measures were imposed globally. Technical education establishments, encompassing engineering colleges, polytechnics, and ITIs, expeditiously shifted their curriculum to digital platforms, utilizing digital resources, learning management systems, and video conferencing apparatuses to impart lectures and foster interactive educational encounters. The transition to online learning brought with it opportunities for increased flexibility, accessibility, and cooperation in addition to logistical problems and digital divides.

Challenges and Solutions

Online learning had advantages, but there were drawbacks to the shift as well. Students from underprivileged regions and rural places found it difficult to participate because of their limited access to technology and internet connectivity. Furthermore, there were particular difficulties for technical disciplines in the online setting that need for actual training and hands-on laboratory work. In response, academic institutions and educators adopted cutting-edge strategies including remote-controlled experiments, simulation software, and virtual labs to give students hands-on learning opportunities from the comfort of their homes.

Upskilling and Reskilling

The disruption brought about by COVID-19 highlighted how crucial it is for workers to reskill and upskill in order to be ready for the digital economy. The provision of online certification courses and skill development programs by technical education institutions was essential in enabling people to gain new skills and maintain their competitiveness in an employment sector that is changing quickly. Online learning platforms provided an extensive array of courses ranging from cybersecurity and digital marketing to programming and data analytics, catering to the changing demands of companies and sectors.

Industry Collaboration

During this pandemic, technical education institutions enhanced their ties with employers and industry associations, realizing the importance of bridging the gap between academia and industry. Industry professionals were invited to mentor students, give guest lectures, and share real-world perspectives on new trends and technology. Programs for internships and apprenticeships have been converted to virtual formats so that students can participate virtually and have exposure to the industry. These partnerships improved the educational experience while also making students more employable and prepared for the workforce.

Future Directions

The COVID-19 experience is influencing technical education in the future as the world slowly recovers from the epidemic. It is anticipated that hybrid learning models which combine online and offline instruction will proliferate. These models combine the flexibility of remote learning with the advantages of in-person instruction and hands-on experience. In order to guarantee the efficacy and quality of online education, investments in digital infrastructure, teacher preparation, and curriculum development are needed. Furthermore, putting a stronger focus on lifelong learning, adaptability, and resilience will be essential to preparing learners for the uncertainties of the post-pandemic world.

Conclusion

Because of the COVID-19 epidemic, technical education is facing previously unheard-of difficulties that call for institutions to rethink, innovate, and modify how they now provide education. Despite certain challenges, the shift to online instruction spurred creativity and teamwork, opening the door for a more robust and diverse technical education system. Technical education may continue to empower people, spur innovation, and support socioeconomic development in the face of hardship by utilizing technology, cultivating industry relationships, and encouraging lifelong learning.



THE "METAVERSE": AN EFFECTIVE TOOL FOR IMPROVING COMPUTER SCIENCE



Moving past the initial thrill, a Notre Dame researcher suggests that we look at how virtual reality may improve scientists' productivity. Researchers must carefully plan their approach and avoid any potential disadvantages in order to take full use of these benefits.

Facebook changed its name to Meta in 2021 and announced plans to create "a set of interconnected digital spaces that lets you do things you can't do in the physical world," which helped popularize the term "metaverse" online. The metaverse has gone under numerous names since that time. While some criticize it as "an amorphous concept that no one really wants," some see it as the "future of the internet."

The metaverse is something else entirely for Diego Gómez-Zarà, an assistant professor in the University of Notre Dame's Department of Computer Science and Engineering: it is a tool for better science.

Gómez-Zarà makes the case in a piece that was just released in Nature Human Behaviour that researchers should utilise the metaverse while also being cautious of the risks associated with working in virtual reality.

Virtual environments, real benefits:

The metaverse is a virtual environment where users can interact in a three-dimensional environment and take actions that affect the real world, according to co-authors Peter Schiffer (Department of Applied Physics and Department of Physics, Yale University) and Dashun Wang (McCormick School of Engineering, Northwestern University).

According to the researchers, there are four key ways that the metaverse might advance science.

First, it may lower obstacles and increase accessibility to science. Gómez-Zarà argues that we don't need to make predictions about the far-off future in order to comprehend these chances. We may instead highlight the ways in which scientists have already started utilising virtual environments in their study.

For instance, researchers at the University College London School of Pharmacy have created a digital reproduction of their lab that can be toured in virtual reality. This digital copy enables scientists from multiple locations to cooperate, meet, and make choices on how to forward a research endeavour.

Similar to this, a virtual lab training programme created by the Centres for Disease Control and Prevention instructs young scientists in several

places on how to recognise the components of a lab and even carry out emergency measures.

This illustration demonstrates a further gain: bettering instruction and learning.

For a person learning to become a surgeon, Gómez-Zarà notes, "It is quite difficult to conduct an operation for the first time without making any blunders. A mistake may also be quite dangerous if you are working with a genuine patient. Virtual environments that allow for experiential learning allow you to try things out and make mistakes along the way without fear of negative repercussions, which may also enhance other types of study.

Additionally, Gómez-Zarà is collaborating with a group at Notre Dame's Virtual Reality Lab to comprehend a third possible advantage, one that is connected to the social side of research. The study team investigates how teamwork processes are impacted by online settings. They discover that virtual workspaces can facilitate team collaboration more successfully than videoconferencing.

We've all become accustomed to videoconferencing since the epidemic, according to Gómez-Zarà. But that doesn't imply that making a video call is the best method for all situations. Virtual reality provides a far more accurate representation of what we would have offline and may be far more successful, especially for

intense social activities like team building and creativity.

According to Gómez-Zarà, the metaverse might be utilised to build entirely original experimental settings.

Gómez-Zarà says, "You can make a virtual replica of that place in virtual reality if you can get data and images from somewhere." He cites the photographs of Mars that have been taken by satellites and robotics as an example. These might be utilised to create a virtual reality environment so that researchers can experience the location. Eventually, they were even capable of remote interaction with the environment.

Potential pitfalls

According to Gómez-Zarà, in order to fully profit from the metaverse, we must also stay clear of a number of its dangers.

Utilising virtual reality still has its challenges. Even if virtual reality goggles and accompanying technology are getting more inexpensive, a substantial investment is still needed.

Who owns the metaverse is a related but separate problem. The metaverse is currently dominated by a small number of tech firms, but according to Gómez-Zarà, there have been demands for government organisations and others that fund research to contribute to the creation of an open, public metaverse. Meanwhile, he asserts that it is critical for researchers to consider issues of ownership and privacy whenever they operate in the metaverse.

But his main message is one of hope. "We still have a tendency to link entertainment and informal interaction with the metaverse. This makes it just too simple to ignore," he argues. But see how easily we have all acclimated to technology that we hardly ever used before to the epidemic. The metaverse may operate in a similar manner. We require the scientific community to investigate it. The greatest approach to consider all the possibilities while simultaneously planning for the hazards is to do just that.

~~~~~Thanks For the Attention....Good Luck All~~~~~

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# ICT AND IMPACTS IN DIGITAL LEARNING BEFORE AND AFTER PANDEMIC

Information communication technologies at present influence every aspect of human life. They are playing salient roles in work places, business, education, and entertainment. Moreover, many people recognize these technologies as catalysts for change; change in working conditions, handling and exchanging information, teaching methods, learning approaches, scientific research, and in accessing information communication technologies. In the present situation, the usage of ICT in the classroom is important for giving students opportunities to learn and apply the required advanced skills. It improves teaching and learning and its importance for teachers in performing their role of creators of pedagogical environments. Information and Communication Technologies (ICTs) exemplified by the internet and interactive multimedia are obviously an important focus for future education and need to be effectively integrated into formal teaching and learning.

## Growth of ICT in India

Contributing over 13 percent to India's GDP, the Information and Communication Technology (ICT) sector and the Digital Economy are major economic drivers. India's digital economy generates



approximately \$200 billion annually from information technology (IT) and business process management (IT-BPM), IT-enabled services (ITeS), E-Commerce, electronics manufacturing, digital payments, and digital communication services. India aims to reach a \$1 trillion digital economy and a \$5 trillion GDP by 2025.

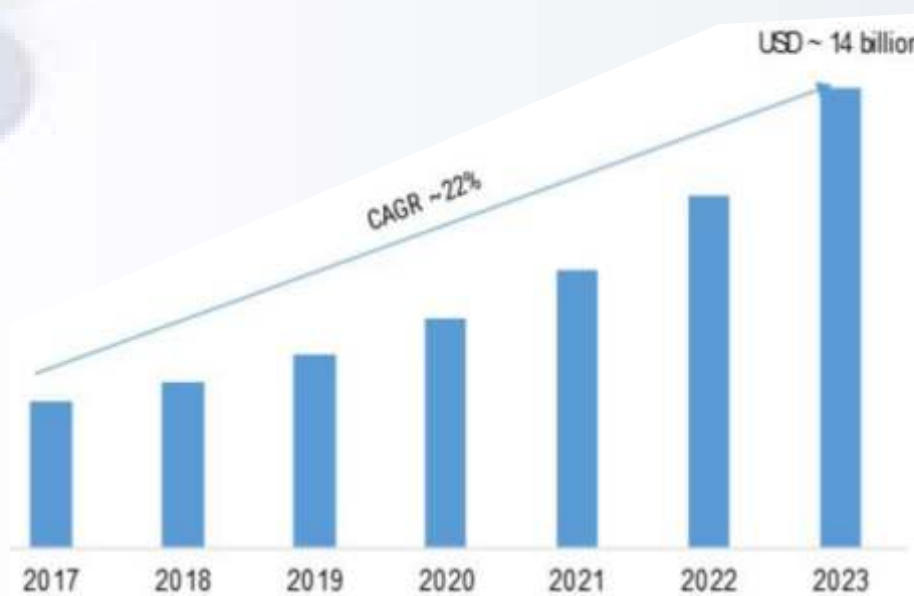
The software and IT services segments are projected to grow 9.3 per cent and 5.5 per cent in 2023, respectively. In India in an average IT spending is estimated to grow 0.5 per cent in 2023, totaling more than \$115 Million which is up from \$109.622 Million in 2022.

| Units:\$ Million(US) | 2021Spending | 2021Growth (%) | 2022Spending | 2022Growth (%) | 2023 Spending |
|----------------------|--------------|----------------|--------------|----------------|---------------|
| Data Center Systems  | 3177         | 14.4           | 3527         | 11             | 3477          |
| Enterprise Software  | 11,245       | 19.9           | 12,625       | 12.3           | 14,356        |



|                            |                |             |                |            |                |
|----------------------------|----------------|-------------|----------------|------------|----------------|
| Devices                    | 49,530         | 37.3        | 48,448         | -2.2       | 47,851         |
| IT Services                | 19,206         | 15.0        | 20,571         | 7.1        | 22,039         |
| Communications Services    | 24,382         | 5.7         | 24,451         | 0.3        | 24,703         |
| <b>Overall IT Spending</b> | <b>107,541</b> | <b>22.1</b> | <b>109,622</b> | <b>1.9</b> | <b>112,427</b> |

India- Mobile Application Development Platform (MADP) Market 2019 Global Trends, Size, Segments, Emerging Technologies and Industry Growth by Forecast to 2023



### Observations

The pandemic has ramped up technology adoption by industries as well as customers. Even the industries that were not IT-driven have shifted from physical to digital mode. Lifting spending restrictions on IT services and software, CRM, collaboration, cloud, artificial intelligence, automation, etc. shall be the drivers of investments during and after the pandemic that can accelerate growth in the Indian IT industry. Cloud has become the need of the hour as it makes the access and maintenance of the data quicker and easier from remote workplaces. To meet this rising demand, IT services companies are making efforts to offer enhanced online services and online working platforms to stay relevant in the market.

**Dr.Sambit Kumar Mishra**

Professor (Department of Computer Sc.&Engg) and Dean(R&D)



# ARTIFICIAL INTELLIGENCE

Hello everyone! Today, we will learn about some interesting tools that have changed the world with their great capabilities. These tools have the potential to create things in text format that you have never expected before. These tools have created a huge impact in the tech world. Yes, we are talking about the most advanced and powerful artificial intelligence tools like ChatGPT, Copilot, and Gemini that have completely revolutionized the tech industry in the current world. So, it's very necessary for you to know about these tools because they will have a huge impact on your life in the coming future. Let's start knowing about these amazing tools that can be very beneficial in everyone's life. ChatGPT, Copilot, and Gemini are basically chatbots that are based on large language models developed by OpenAI, Microsoft, and Google, respectively. Among these tools, ChatGPT is the most popular and fastest. So in this article, we will only focus on ChatGPT, and you will automatically learn about the other two because these tools are very similar.

ChatGPT became very popular and captured the market very rapidly after its launch. This tool will answer your questions in a quick way. Here, you will get human-like responses in text format because it uses machine learning algorithms and natural language processing (NLP) to generate text-based human-like responses. These tools are powered by a large amount of data and computing techniques to answer your questions in a meaningful and proper way.

It can be very beneficial for automating tasks, repetitive work, etc. It can also be used by any group of people, like students, teachers, businessmen, writers, speakers, workers, etc. Students can use this to learn about physics, mathematics, biography, history, technology, the world, the universe, and various topics according to their interests. It can also be used to grow businesses. In the current world, many companies are partnering with this to improve their company's productivity. They may use this tool

as a virtual chat assistant on their websites, where no human intervention is required. We can use this tool to create amazing things. You can become more productive by using this tool. It can write poems, stories, programming codes, and various other things in your mind. In recent updates, you can now create images and videos by just writing the prompts in text format. This tool is like a brain that can be used in humanoid robots.

We can also use it for research purposes while exploring the universe. Currently, we don't have complete knowledge of the universe, so it can be very useful for that. As we have already talked a lot about the advantages of using AI, we should also keep in mind that these tools are not completely accurate. It can provide you with misinformation or

biased responses that might misguide you. So, it's your responsibility to double-check the information that you have in your responses. Lastly, I will say that if you use this AI tool properly, it can be very helpful for you, and if you use it in an improper way, it can be harmful for you as well. So, it depends on you how you are going to use this tool. Thus, use it wisely to be more productive and do some great things that should be beneficial for humanity.

**by Prabhat Pandit**





# THE TEACHINGS OF BHAGWAN BUDDHA

Bhagwan Buddha was born, lived and died like any other human beings. He never pronounced himself as God, Prophet or any other supernatural being. Only after his death, people started worshipping him as God because of his teachings and the path shown by him for spiritual awakening. The word “Budh” comes from Sanskrit which means “to wake up”.

Bhagwan Buddha says, make of yourself a light, rely on yourself and donot depend on anyone else. Be your own master. Don't react or dance with other's tune. Make yourself free from all types of bondages and worldly desires which unrests you and drags you to the well of darkness. This can be achieved only by getting control over one's mind. Keep the mind pure, free from any types greed and fear. Keep your behaviour right and words truthful & faithful. By always thinking the transiency of life, you will be able to resist all types of greed, fear and anger.

Nothing is permanent. Life is ever changing. None can escape from the dissolution of this physical body. So, do not cherish the unworthy desires that the changeable might become unchanging. The demon of worldly desires is always seeking chances to deceive your mind. If you wish to have a peaceful sleep, you must first chase it out and protect your own mind.

A man's mind may make him a Buddha or may make him a beast. Therefore you must control your mind and donot let it deviate from the right path. For this, BhagwanBuddha has shown the path of silent meditation and attained enlightenment.

Meditation is the state where you enter into the world of eternal peace and happiness, called “Samadhi” and all your desires get fulfilled. So, there no desires left. This is a process of life andattained in different stages to reach the state of “Samadhi”. There is no past, no future and no present.

You should respect each other. Refrain yourself from disputes. You shouldn't be like water and oil, as they repel each other. You should be like milk and water as they always mingle together. You must be truthful at any point of time. You must live and enjoy the present without any outside thoughts.

The death is only the end of physical body, that was born from parents and was nourished by food, grown up with worldly desires as inevitable as sickness and death. But the true Buddha is not the human body. It is the Enlightenment. A human body must die, but the wisdom of Enlightenment will exist forever in the truth and practice of Dharma.

The spirit of Bhagwan Buddha includes love, kindness and compassion. Bhagwanonce said, your suffering is my suffering, your happiness is my happiness, just as a mother always loves her child. She never forgets that spirit even for a single moment. The eternal Buddha is the timeless compassion that has been operative since unknown time. The true Buddha is the Enlightenment itself. The true way to know Buddha is to realize Enlightenment.

Bhagwan once told to his disciples about a certain story : There lived a wealth man whose house was caught on fire. The man was away from home. When he came back, he found that his children were so absorbed in play that they had not noticed the fire and were still inside the house. The father screamed , “Get out Children ! Come out of the house ! Hurry up ! But the children didn't heed him. The anxious father shouted again, Children, I have some wonderful toys and chocolates for you. Come out of the house and get them. The children came out of the burning house immediately.

So, this world is burning house. The people unaware that the house is on fire and they are in danger of being burnt to death. Buddha is the compassion who devises various ways to save them. With love, he conceives the wisest methods to lead, teach and enrich people with the treasure of Enlightenment. In compassion, clears away all the darkness of ignorance. Buddha is a father in his compassion and a mother in his love and kindness.

**Hrusikesh Nath**

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# BIOINSPIRED TECHNOLOGIES

*"Biomimicry is a practice that learns from and mimics the strategies found in nature to solve human design challenges. "*

The word biomimicry was coined by Janine Benyu (1997) when she came out with her book *Biomimicry: Innovation Inspired by Nature*. Her book is a collection of stories describing the work of scientists, engineers, and inventors who were translating their fascinating observations of functional strategies found in biology into innovative technologies. Before this book came out, this inspired-by-Nature approach to invention and innovation was referred to with terms like bionics, bio-engineering, or biomimetics. Benyus recognized that these terms might feel too technical and off-putting for her readers, so she came up with the term 'biomimicry', which she felt was more approachable.

Benyus wanted to share these new ways of viewing and valuing Nature and what she saw was the great potential for biomimicry to help us achieve sustainable innovation. Biomimicry offers an empathetic, interconnected understanding of how life works and ultimately where we fit in. It is a practice that learns from and mimics the strategies used by species alive today. The goal is to create products, processes, and policies - new ways of living - that solve our greatest design challenges sustainably and in solidarity with all life on earth. We can use biomimicry to not only learn from nature's wisdom, but also heal ourselves - and this planet- in the process.

## **"Biomimicry brings relief"**

We're stressed. Our planet is stressed. Many are losing hope for solving the climate crisis and its many negative effects on ecosystems across the world. Biomimicry gives us hope, because we know the solutions for our greatest challenges are here, accessible, and validated by the many species still alive today. By using nature as our mentor, we get to experience the powerful healing effects it has by connecting to the natural world - while also finding empowering relief to solve these challenges together.

## **"Biomimicry helps us design generously"**

Circularity, sustainability, regenerative design - it all means that the things we humans make become a force for restoring air, water, and soil instead of degrading it. Nature uses structure to change functions and also uses passive forms of energy, whereas our inventions use brute force like mining ancient carbon and a multitude of harmful chemicals. We can create conditions conducive to life, just like nature does.

## **"Biomimicry gets us to sustainable solutions, faster"**

Our R&D cycles are slow, and climate change won't wait - we must look to the biological blueprints that have been successful over millennia to launch groundbreaking ideas, faster. We don't need to reinvent the strategies that are already here. We just need to learn how to adapt them.

## **"Biomimicry changes our lens on the world"**

Innovators turn to biomimicry with the hope of achieving a unique product that is efficient and effective, but they often gain a deep appreciation of and connection to the natural world. Biomimicry encourages conservation for ecosystems and its inhabitants, because they hold the wisdom we need.

## **The 3 Essential Elements of Biomimicry**

When translating nature's strategies into design, the science of the practice involves three essential elements: Emulate, Ethos, and (Re)Connect. These three components are infused in every aspect of biomimicry and represent these core values at its essence.

### **Emulate**

The scientific, research-based practice of learning from and then replicating nature's forms, processes, and ecosystems to create more regenerative designs.

### **Ethos**

The philosophy of understanding how life works and creating designs that continuously support and create conditions conducive to life.

### **(Re)Connect**

The concept that we are nature and find value in connecting to our place on Earth as part of life's interconnected systems. (Re)Connect as a practice encourages us to observe and spend time in nature to understand how lifeworks so that we may have a better ethos to emulate biological strategies in our designs.

Bioinspired methodologies take many forms, especially as each designer, engineer, scientist, and innovator attempts to derive solutions that will be most impactful for the specific problems they encounter. Each approach has its merits and has produced useful, sustainable, and disruptive innovations.

Rudrani Senapati

Department of MCA, Regd. No - 2305326060



# BONDS BEYOND BORDERS

## A Tale of College Friendship



In the heart of our college campus, amidst the bustling corridors and lively classrooms, assignments, and extracurricular, there existed a special bond that transcended barriers of distance, culture, and background, the friendship woven with threads of laughter, support, and shared experiences. It was a bond forged in the crucible of college life, where friendships bloomed like wildflowers in a meadow, vibrant and resilient.

At the centre of this story were four students: Swarna, Mousumi, Bijayini and Alifiya. They came from different corners of Odisha, each with their own dreams, aspirations, and fears. Swarna and Mousumi were school friends and they both were from the Coffee Land Koraput, Bijayini was from the Steel City Rourkela, and Alifiya was from Biraja Kshetra Jajpur. They came from different backgrounds, with diverse interests and dreams, but their paths converged in the corridors of their college, where they found the bond that would withstand the taste of time.

Swarna was the quiet observer, Mousumi was the social butterfly, Bijayini was the creative soul, Alifiya was the shoulder to lean on in times of need. They did not have a good connection at first, the bond was about to break but as time passed, all of started understanding each other, sharing talks, exchanging stuffs, we were always there for the bond. They bonded over late-night study sessions and movies, unplanned adventures, and the ups and downs of navigating adulthood. Together they laughed, cried and grew, forming a bond that felt like family.

But their friendship was not without challenges. They faced academic pressures, feelings of homesickness, loneliness, cultural adjustment. Yet, in each other, they found support, and a sense of belonging. Through their friendship, they found the true meaning of empathy, compassion, and acceptance. They learned to celebrate their differences, embrace their similarities, and navigate the complexities of college life together. And in doing so, they formed a bond that was unbreakable.

And as they stood together, they realized that college had not only equipped them with knowledge and skills but had also gifted them with something far more precious: lifelong friendships that would last beyond the campus walls. They knew that no matter where life took them, they would always carry with them the memories, the laughter, and the love they had shared as college friends as well as roommates.

Swarna Prava Parida  
CSE (2<sup>nd</sup> year)





## WILFULLY RECKLESS

A crow was sitting on a tree, doing nothing all day. A rabbit asked him, "Can I also sit like you and do nothing all day long?" The crow answered, "Sure, why not." So, the rabbit sat on the ground below the crow and rested.

A fox jumped on the rabbit and ate it.

Moral of the story: To be sitting and doing nothing, you must be sitting very high up.



## ENGINEER VS MANAGEMENT

A man is flying in a hot air balloon and realizes he is lost. He reduces height and spots a man down below. He lowers the balloon further and shouts: "Excuse me, can you tell me where I am?"

The man below says: "Yes, you're in a hot air balloon, hovering 30 feet above this field."

"You must be an engineer" says the balloonist.

"below man" replies the man. "How did you know?"

"Well," says the balloonist, "everything you have told me is technically correct, but it's no use to anyone."

The man below says "you must be in management."

the balloonist replies, "but how did you know?"

"Well," says the man, "you don't know where you are, or where you're going, but you expect me to be able to help. You're in the same position you were before we met, but now it's my fault."



Priyaranjan Parida  
IT Administrator, GIET



# CREATING A DESTINY OF YOUR CHOICE



To change our destiny, we need to create the right thoughts & make that happen in a natural way, we need to consume right information.

In this information age, we've an overflow of knowledge. Do we check the quality of the information we are consuming? Does it matter or can we listen, read & watch everything that is fed-up to us? Like food is a vital part of our body; INFORMATION is the food for our MIND. Every piece of knowledge we consume becomes the source of our thoughts. Our every thought is followed by a feeling. Feelings over a period of time develop our attitude. Attitude comes out into action. Any action done repeatedly becomes a habit. All our habits put together is our PERSONALITY. Our personality radiates good & positive energy & as will be the energy we send out, so will be the energy we receive according to the law of KARMA; which becomes our destiny through KNOWLEDGE. Let us be aware of this inner process & see the impact of our thoughts on our destiny & the influence of the information on our thoughts.

## **SIMPLE FORMULA INFORMATION=PROPER KNOWLEDGE=DESTINY**

We want a destiny of peace, love, happiness, health, wealth, harmony & to be a well-established person. To change our destiny, we will need to create the right thoughts & to make that happen in a right way, we need to consume good habits, proper knowledge & right information with our constant dedication; towards our goal with a successful & beautiful future.

Let us begin the day with taking some time of healthy information. Our SELF-CONFIDENCE can be our BEST FRIEND on this journey. Information full of wisdom & deep insights which nurture the mind & empower us to create right thoughts in every situations & choose a beautiful destiny daily. Facing a challenge or just a little confused..... Our BEST FRIEND is always with us. Just read a little piece of career-oriented & spiritual information daily & read every word & feel the mind dignified way.

## **CREATING A DESTINY OF OUR CHOICE....IT'S ONLY ONE THOUGHT AWAY.....**

This is my Future Defined School;  
It's a Roof of Wisdom, Career Builder & Faith so Beautiful;  
Here everyone Acquire Deep Knowledge of Life;  
Explore Innate Qualities & Power of Survive;  
Students Study together with High Spirit;  
There are Picnics, Study Tours, Seminars & Conferences;  
There are Subjects on Human Values;  
Which Develops Deep Down Hidden Virtues;  
There are Yoga, NSS; give New Vision;  
& Calculative Math, Physics, Science that gives Formulas for Life Mission;  
Geography of the Beyond World;  
Civics of Self Administration & Sovereignty;  
Students also learn the Language of Honesty & Modesty;

"EDUCATION" may or may not teach us how to add love or how to minus hate but it surely & always gives us at least ONE GREAT HOPE that "EVERY PROBLEM HAS A SOLUTION".





## PHASE-FIELD MODELING OF MICROSTRUCTURE

The phase-field method has become an important and extremely versatile technique for simulating microstructure evolution at the mesoscale. Thanks to the diffuse-interface approach, it allows us to study the evolution of arbitrary complex grain morphologies without any presumption on their shape or mutual distribution. It is also straightforward to account for different thermodynamic driving forces for microstructure evolution, such as bulk and interfacial energy, elastic energy and electric or magnetic energy, and the effect of different transport processes, such as mass diffusion, heat conduction and convection. The purpose of the paper is to give an introduction to the phase-field modeling technique. The concept of diffuse interfaces, the phase-field variables, the thermodynamic driving force for microstructure evolution and the kinetic phase-field equations are introduced. Furthermore, common techniques for parameter determination and numerical solution of the equations are discussed.

To show the variety in phase-field models, different model formulations are exploited, depending on which is most common or most illustrative. Direct Metal Laser Sintering (DMLS) is a new technology in the field of additive manufacturing, which builds metal parts in a layer by layer fashion directly from the powder bed. The process occurs within a very short time period with rapid solidification rate. Slight variations in the process parameters may cause enormous change in the final build parts. The physical and mechanical properties of the final build parts are dependent on the solidification rate which directly affects the microstructure of the material.

Thus, the evolving of microstructure plays a vital role in the process parameters optimization. Nowadays, the increase in computational power allows for direct simulations of microstructures during materials processing for specific manufacturing conditions. In this study, modeling of microstructure evolution of Al-Si-10Mg powder in DMLS process was carried out by using a phase field approach. A MATLAB code was developed to solve the set of phase field equations, where simulation parameters include temperature gradient, laser scan speed and laser power. The effects of temperature gradient on microstructure evolution were studied and found that with increase in temperature gradient, the dendritic tip grows at a faster rate.

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## THE ERA OF PAPER CURRENCY TO DIGITAL CURRENCY

Money refers to anything widely accepted as payment for goods or fulfilling wants, or any other obligations. The shape and purpose of money have changed over time as the economy and payment system have evolved. Currency has evolved from barter to valuable metal coins made of bronze and copper, later incorporating silver and gold. The use of coins was a huge milestone in the history of money because they were one of the first currencies that allowed people to pay by count (number of coins) rather than weight.

Initially, paper notes were simple claims to metallic money. But with the passage of time, paper money came to be regarded as money itself. Initially, commercial banks could issue paper currency, but over time, it became the monopoly of a country's central bank. It is called as 'Fiat Paper Money', which is legal tender and generally accepted in exchange for goods and services. These notes could be exchanged for gold or silver coins when demanded. Therefore, it was called representative paper money.

With the passage of time, it was believed that a 100% reserve of gold against paper money printed was unnecessary and that a 30 to 50 percent ratio was sufficient to convert the notes offered for conversion into gold. Thus, the "Proportional Reserve System," which was implemented and adopted in 1927, was abandoned in 1957 due to being deemed insufficient for the growing economy's monetary needs. So, the Minimum Reserve System was implemented in 1957 to keep only a minimum amount of gold and other approved securities (such as the dollar and pound sterling).

Recently, the Indian Union Government has made necessary amendments to the Reserve Bank of India

Act, 1934, enabling the implementation of a pilot programme and the subsequent issuance of Central Bank Digital Certificates (CBDCs). The digital versions of traditional fiat currencies are issued by central banks for various purposes, like reducing the risks and costs associated with handling physical currency, phasing out soiled notes, transportation, insurance, and logistics, while also reducing reliance on cryptocurrencies. More importantly, it would provide the general populace with an alternative to unregulated cryptocurrencies and their associated risks. CBDCs are categorized into retail (CBDC-R) and wholesale (CBDC-W) based on their usage and functions. CBDC-R is for retail consumption and can be availed of by all, including the private sector, non-financial consumers, and businesses. CBDC-W is meant for inter bank transfers and wholesale transactions by financial institutions, which helps improve the efficiency of inter bank payments or securities settlement.

### Benefits of CBDCs

- CBDC offers a convenient method for accelerating the development of a reliable, sovereign-backed domestic payment and settlement system, partially replacing paper currency.
- The development will make digital currencies more accessible to people, just as UPI made digital cash easier to use.
- The increased use of CBDC in various financial activities could facilitate the transition of the informal economy into the formal sector.
- It enhances tax and regulatory compliance.
- It will give a big boost to the digital economy.



### **Challenges of CBDCs**

- The first issue to tackle is the heightened risk to the privacy of users.
- If it is not appropriately controlled and supervised, it can be used for organised crime, illicit trade, and criminal activity.
- India's digitally illiterate populace is currently unprepared to handle digital currencies like cryptocurrencies.

### **Conclusion**

India's cash-based society faces challenges such as cost, time, counterfeiting, and tracking issues. The RBI's digital initiative aims to replace traditional currency notes with e-Rupees, which could increase financial inclusion and economic growth. So, education and awareness campaigns are needed to promote adoption, and the architecture should integrate with payment gateways like digital wallets and UPI. Government guidelines and cryptographic protocols are needed to boost public confidence. Despite the challenges, India has a chance to lead the world in digital currency adoption, promoting innovation, rivalry, and payment efficiency. The initiative aims to open discussions on the best course of action.

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# "ENERGIZE TOMORROW: THE POWER OF ENERGY CONSERVATION"

Energy conservation is more essential than ever in a society where energy consumption is increasing. An effective and systematic way to minimize the consumption of energy without compromising productivity is through energy conservation. Energy conservation is currently in the spotlight as an effective method that not only reduces the impact on the environment but also offers long-term economic benefits. Through process optimization, smart technology adoption, and responsible culture development, we can open the door to a sustainable future that includes financial savings, environmental protection, and a shared commitment to creating a resilient planet. Conserving energy offers us the chance to rethink our relationship with the environment and create a sustainable future, not just a responsibility. As we navigate the complexities of a rapidly evolving world, let us recognize the power we hold to conserve and cherish our finite resources. By embracing energy conservation, we pave the way for a future that harmonizes economic prosperity, environmental resilience, and a collective commitment to the well-being of our planet.

Starting an energy-saving journey is a significant step toward creating a future that is durable and innovative, not only a commitment to protect the environment. Every deliberate attempt to maximize energy use is a glimpse of hope, showing the way to a sustainable future where environmental stewardship and economic prosperity coexist together. Every single step counts toward creating a collective force for change in the arena of energy conservation. It's a call to nations to work together in a global endeavour, to individuals to develop conscious habits, and to corporations to embrace efficiency. We all possess the ability to preserve, and when we use it, we not only protect the environment but also move closer to a day when the things we do now will serve as an inspiration to future generations.

Together, let's fuel the transformative potential of energy conservation today for illuminating a brighter and more sustainable tomorrow."

*For your better tomorrow, save energy today...*



**Dr. Anshuman Bhuyan**  
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# LOVE AND TIME

Once upon a time, there was an island where all the feelings lived: Happiness, Sadness, Knowledge, and all of the others, Including Love. One day it was announced to the feelings that the island would sink, so all constructed boats and left. Except for *Love*.

Love was the only one who stayed. Love wanted to hold out until the last possible moment. When the island had almost sunk, love decided to ask for help.

Richness was passing by love in a grand boat. LOVE said, "Richness, can you take *me* with you?" Richness answered, "No, I can't. There is a lot of gold and silver in my boat. There is no place here for you." Love decided to ask Vanity who was also passing by in a beautiful vessel. "Vanity, please help me!" "I can't help you, Love. You are all wet and might damage my boat," Vanity answered. Sadness was close by so Love asked "Sadness, let me go with you." "Oh... Love, I am so sad that I need to be by myself!". Happiness passed by Love, too, but she was so happy that she didn't even hear when Love called her.

Suddenly, there was a voice, "Come, Love, I will take you." It was an elder. So blessed and overjoyed, love even forgot to ask the elder where they were going. When they arrived at dry land, the elder went her own way. Realizing how much was owed the elder, love asked Knowledge, another elder, "Who helped me?" "It was Time," Knowledge answered. "Time?" asked love. "But why did Time help me?"

Knowledge smiled with deep wisdom and answered, "Because only Time is capable of understanding how valuable love is".

PROF .SARMISTHA PALAI  
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# ADDITIVE MANUFACTURING

Additive Manufacturing refers to a process by which digital 3D design data is used to build up a component in layers by depositing material. The term "3D printing" is increasingly used as a synonym for Additive Manufacturing. However, the latter is more accurate in that it describes a professional production technique which is clearly distinguished from conventional methods of material removal. Instead of milling a work piece from solid block, for example, Additive Manufacturing builds up components layer by layer using materials which are available in fine powder form. A range of different metals, plastics and composite materials may be used.

The technology has especially been applied in conjunction with Rapid Prototyping - the construction of illustrative and functional prototypes. Additive Manufacturing is now being used increasingly in Series Production. It gives Original Equipment Manufacturers (OEMs) in the most varied sectors of industry the opportunity to create a distinctive profile for themselves based on new customer benefits, cost-saving potential and the ability to meet sustainability goals.

## Benefits

The strengths of Additive Manufacturing lie in those areas where conventional manufacturing reaches its limitations. The technology is of interest where a new approach to design and manufacturing is required so as to come up with solutions. It enables a design-driven manufacturing process - where design determines production and not the other way around. What is more, Additive Manufacturing allows for

highly complex structures which can still be extremely light and stable. It provides a high degree of design freedom, the optimization and integration of functional features, the manufacture of small batch sizes at reasonable unit costs and a high degree of product customization even in serial production.

## Functional Principle

The system starts by applying a thin layer of the powder material to the building platform. A powerful laser beam then fuses the powder at exactly the points defined by the computer-generated component design data. The platform is then lowered and another layer of powder is applied. Once again the material is fused so as to bond with the layer below at the predefined points. Depending on the material used, components can be manufactured using stereo lithography, laser sintering or 3D printing. EOS Additive Manufacturing Technology based on laser sintering has been in existence for over 20 years.

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# LEADERSHIP QUALITY

In today's educational world, mentoring young and newly-entrant teachers in technical and other institutes and university in a formal way has become a necessity in order to make the teaching-learning process most effective for both students and teachers, the primary stakeholders of any educational institutions. Over the years, the educational systems for higher study at the college and university level have gone through a sea change across the world, in general, and in post-independence India, in particular, responding to students' and researchers' wants, getting access to educational outcomes of their choice and preference from multiple strata of the societies, probably for the first time in the history of mankind. A young teacher, in this constrained environment, needs guidance and mentoring from both his or her senior/supervisors colleagues and strong interacting with students' requirements at individual levels primarily to gain potential knowledge and wisdom supporting their inquiring process. In this context, mentoring in truest sense is most effective if it supports leadership as applicable in a social and individual level, strengthening both one-to-one and one-to-many relationship in teaching-learning process. The lecture focuses on, in the context of mentoring, several dimensions of leadership as applicable, in varieties of conditions and constraints and proposes a mentoring system based on leadership potential of concerned personnel. Primary effectiveness of mentoring process depends on quality of leadership.

As has been stated, in the broad sense, the purpose of mentoring to support and encourage students and fellow colleagues to become intrinsically motivated to control and improve their learning, following both trail-and-error and Gestalt theories of learning, in order to maximize their potential, and skills to improve their

performance while they impart education to students and researchers. Directly, they demonstrate their ability to transfer knowledge in one or more areas of interest and attitude most effectively to the students and other stakeholders. Indirectly, or in the long run, the persons mentored adequately and correctly are expected to improve their performance continually resulting in a mindset to fulfillment of 'self-actualization' need. At this stage, in all likelihood, a mentored person becomes a wise teacher, meeting the conditions of a noble profession.

A mentoring system, while established as a formal one, may be of different types: one-to-one and group while distance education system is being promoted primarily to provide access of learning process to primarily less privileged and economically poor/deprived class of people at all strata of the society, a distance mentoring is also used in other country where an education and training system is developed to meet the words of education and training for people living at all strata of the society, a unique characteristic that is absent in many other countries of the world! One of the main advantages of mentoring is its promotion of consistency in level and quality of knowledge among teachers and educators. A standard mentoring system based on all of scientific principles meeting the requirements and aspirations (aim in life) is proved to be a very useful approach to meet the societal needs. Mentoring increases the level of 'job satisfaction'

and help teacher emerge as leaders with positive impact on students' potential, capability, achievement and engagement. A senior teacher should act as a 'role model' to young teachers (fresh entrant) and help build and develop self-confidence, resilience and character. As a mentor, a teacher must have adequate leadership quality. We may define and explain quality of leadership, and there are many contextual definitions of leadership from quality perspectives and dimension. However, in the mentoring context in educational systems, leadership quality primarily focusses on of students, young and junior teachers, researchers, and learners granting permission to make mistakes to encourage to honestly admit them, and to provide opportunity to learn from them. The quality of leadership is also judged by the conviction that increases stamina to strive towards performance excellence in a noble profession, called teaching. The lecture session, a number of relevant issues in today's context, such as essential of leadership quality in mentoring process, leading

practices for leadership and their relevance in mentoring process, contemporary and emerging leadership theories, management and planning tools for leaders, where do need technical know-how for leadership, kinds of leadership techniques (level-1, level-2, level-3) and their applicability in mentoring in educational systems, and how comprehensive 'leadership excellence' is related to mention of human assets, called teachers and researchers, will be discussed. It is hoped that contexts of the lecture session and its interaction mode with the participants at the session would help as educational institutes of many variety, assess existing level of leadership quality, its mentoring process and improve its leadership quality continually, making it a robust and suitable one.

By **Prof. Suvendu Mohanty**  
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# ROLE OF AI IN RESEARCH AND EDUCATION



The Role of Artificial Intelligence (AI) in Research and Education extends beyond its application in academic pursuits; it also emphasizes the imperative for students to acquire proficiency in AI to enhance task efficiency, speed, and time management. This article delves into the multifaceted impacts of AI technologies across research and education, highlighting their transformative potential and the necessity for students to learn AI's application. In research, AI expedites data analysis, modelling, and prediction, revolutionizing the scientific landscape. Machine learning algorithms empower researchers to navigate vast datasets, extracting patterns and insights that elude human perception. Moreover, AI streamlines experimentation processes, accelerating scientific discovery and innovation.

By learning AI applications, students can optimize their research workflows, making tasks faster, more efficient, and ultimately timesaving. However, ethical concerns such as data bias and interpretability challenge the seamless integration of AI into research methodologies. In education, AI fosters personalized learning experiences tailored to individual student needs and preferences. Adaptive learning platforms leverage AI algorithms to assess student performance, deliver tailored learning materials, and provide real-time feedback. Virtual tutors and chat bots supplement traditional teaching

methods, offering on-demand assistance and promoting student autonomy. By equipping students with AI skills, they can leverage these technologies to streamline their academic tasks, enhancing efficiency and time management. Yet, ethical considerations regarding algorithmic fairness and privacy persist in educational AI implementations. In conclusion, the Role of AI in Research and Education underscores the importance of students learning AI applications to optimize their tasks. While AI offers transformative benefits, addressing ethical concerns and ensuring equitable access remain paramount. Through interdisciplinary collaboration and ethical guidelines, stakeholders can harness AI's potential to propel research and education into a future marked by innovation and inclusivity, empowering students to navigate their academic journeys more efficiently.

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*The  
Greatest Service  
to Humanity*

## SERVICE TO HUMANITY

Humanity is not about maintaining a gracious relationship between one another in the society but it is about building a bond amongst the society with the help of a sustainable values. Humanity is not about showing passion and empathy to each other at times of need but about regarding love in high esteem and kindness in all walks of life. Humanity is not just a word for symbolizing the human compassion and civilization but it goes beyond the horizons of human nature and his creations.

It is all about using hearts along with the minds in all the endeavours of human kind. Human kind has come a long way in learning the ways of building relations and creating civilizations in order to inhabit this world with livelihood full of love and harmony. Every human has a part in doing this great task of taking ahead the human race to a dignified and noble place on this planet. And this is where we all have to be proud of ourselves and pass this message on to the future generations.

Humanity, in general, is perceived as a charity. As the old saying goes, it begins at home. It spreads across the roads we travel, places we dwell, and people we meet. Humanity, not as many criticize, is scarce today. It is very much available in plenty. In fact, it has grown and evolved much better than centuries ago. From the individualistic aspect to a social, or even in a much larger perspective, humanity has thrived well in embracing and supporting the human race in many different forms.

Nevertheless, more and more people are still out there who are not that fortunate to live the humanity in its central point of its existence; they are out there to seek the rays of hope and love and brace the traces of

passion and kindness.

In *Young India* (1924) Gandhiji wrote, "I want to identify myself with everything that lives." He had an incredible experience with the people, their lives not only in India but across South Africa and England as well. He believed that the salvation of his life is through serving the nation and people whom he loved beyond anything else in the world. His communication and connection with the people were so splendid that the whole world could visualize in him the love and care revealed by Jesus Christ and Buddha. The rich or poor, literate or educated, Indian or a foreigner, Gandhiji did the service to all and his principles stand even today as a bond connecting people belonging to various communities, nations and races. He remains dispelled everywhere around the world as the tallest symbol of humanity.

Today's world, when we look at it in a social point of view, is full of greed, commotion, distress and distrust. Besides becoming more civilized and learning about the intricacies of human race and development, we humans are mired by the new wave of modernization and outcomes of transformation due to technology innovations and cultural incursions. As a result, we are preoccupied with our television, mobile phones, computers, etc., spending less time with the fellow humans. Our direct interactions with our children, neighbours, and friends are taken away by this massive modern hi-tech living style. We do realize many times a day the importance of humanity, love and kindness to other living beings but could not divulge them directly upon any one. We keep humanity in high regard in principle but have no time to give it a meaning in our own life.



We do not expend even a little time, a few seconds in the service of humanity, in the form of prayers or meditation or by any deeds. Throughout his life, Gandhi ji was a humble servant of India and humanity. I believe in absolute oneness of God and, therefore, also of humanity. What though we have many bodies? We have but one soul. The rays of the sun are many through refraction. But they have the same source. It comprehends the whole of humanity. Its realization would thus mean the establishment of the Kingdom of Heaven on earth.

"All humans are one and only one, regardless of caste, creed, religion and race. This oneness would bring the world full of peace and harmony. The future of humanity lies in this oneness. As we narrow down the differences amongst us, broader the outlook on humanity arises; out of which the whole human race can live unto peace. For centuries, the world was gripped with the evils of untouchability, religious conflicts and the effluents dominance over the poor. In battling against the untouchability, Gandhiji had a vision of no less than a complete regeneration of humanity. His ideology of non-violence itself is the mirror of humanity.

In Harijan dated 20-7-1935, he wrote "Every murder or other injury, no matter for what cause, committed or inflicted on another is a crime against humanity."

Gandhiji always held the service in high regard and in his own words, "I am endeavouring to see God through service of humanity; for I know that God is neither in heaven, nor down below, but in everyone." Service to humanity has taken many forms in today's society. From individuals to self-interested groups, small charity organizations to a larger corporate house, private entities to nongovernmental organizations, humanity has been served with a wide range of services that include education, food, health measures, housing, accessibility assistance to the physically challenged, re-orientation programmes to the socially excluded, mentally challenged and victimized people from all sects of the society. People nowadays get more access, than yesteryears', to the schemes and plans meant for the deprived and under-privileged.

One shall have the courage to face the hard-times in life. Human kind, right from its birth, always try hard to survive doing all sorts of work. There is no divide between the poor and the rich in doing the hard work. The rich works hard to become richer; poor works hard to earn his days' bread. By whatever means we divide the humanity based on caste, creed, religion or colour, the hardship remains the same. But social inequalities often tend to instil a divide among the people even in sharing the hardships. An ailing man may perhaps be seen as a social iniquity or a starving child may well be seen as a social illness. Our views on the society draw a major attention in today's world. A sect or a group shall not be neglected for any grounds that thrash them down to pitiable conditions. Overlooking on any such issue would be a social disharmony and disorder. Every human born on this planet do have all the rights what he ought to have. The dignity of the human kind lies in equality and justice for all. As Gandhiji put it "Dignity of human nature requires that we must face the storms of life."

As the life is getting hard day by day, it is natural for any human to disregard the needy impoverished; it is natural for us to go with the business of the world every day, not giving enough to the deprived; it is natural for us to forget the fact that it is our obligation to help the destitute. Very rarely we turn to what the others do or want. As we focus more and more on our self, the social tensions and imbalance arouse and lastly the peace is getting disturbed. We must remember Gandhiji's words, "Not to believe in the possibility of permanent peace is to disbelieve in the godliness of human nature. " We shall have to see God within ourselves and strive to believe others too in our selves. When we see everyone as a single embodiment of the God, peace would emerge within us; slowly, we would realize that such calmness getting inducted in our surroundings as well. And, thus could the whole society see the all within it in unison.

Needless to say, how religious harmony takes an essential place in the nations' peaceful conditions. Had we look in to the colour, race and religious sentiments of each and every person we meet every day, our living conditions would have worsened to an unbelievable amount. Differences among ourselves had hurt us in the past. Divisiveness had cost us social inequality and economic disparity. It was only during the rigorous freedom struggle led by Gandhiji and the leaders like

Nehru, Patel, Netaji, had we realized the need for oneness. Not only the nation's liberty and integrity commanded the oneness. The whole of humanity lies in the oneness of all and the oneness of every caste, creed, religion and culture. While leading the freedom movement for India, Gandhiji had to face so many social evils such as Casteism, Atheism, Untouchability, Hindu-Muslim conflicts, Sati etc. that endanger the very existence of humanity. He was determined to forbid all these barriers and led the country to freedom. He was persistent in his ideology of oneness and service to humanity as a whole. "I can neither serve God nor humanity if as an Indian I do not serve India, and as a Hindu I do not serve Indian Muslims." On this particular issue of conversion from one religion to another, he was very much ardent in maintaining humanity and its real spirit. At one time, he said, "I hold that proselytizing (religious conversions) under the cover of humanitarian work is, to say the least, unhealthy."

What... does Jesus mean to me? To me, He was one of the greatest teachers humanity has ever had." These words from Gandhiji were not just for soliciting votes from various religious sects. They do not mean that he was propping up for the British rulers either. But they signify the true purpose of the birth of Jesus who left (?) the world with the message of love and brotherhood. His life was a perfect example for how humanity has both the lighter and darker sides through which the whole of humanity and its nature can be adjudicated.

### **Summary**

Thus, the service to humanity results in the oneness. It brings hope and life to the downtrodden and the disheartened. When peace and harmony become the main cause of every kind of service rendered to the nation and its people, it becomes the service to God. When an orphan gets a cuddling hand to light their life, it becomes a Godly gesture. When a deprived lives blissfully along with the rest of the humanity, it is the kingdom of God.

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## TOPIC- FATHER'S SACRIFICE

A father's sacrifice is a profound expression of love and dedication that often goes unnoticed. It encompasses a multitude of actions, big and small, that demonstrate his unwavering commitment to the well-being and happiness of his family. One of the most common sacrifices a father makes is in his career. He may work long hours, take on multiple jobs, or pursue opportunities that may not align with his personal passions but ensure a stable and comfortable life for his loved ones. This dedication often means sacrificing time that could be spent with family or pursuing personal interests.

Beyond career sacrifices, a father often sets aside his own desires and ambitions to prioritize the needs of his children. He may forgo hobbies, vacations, or other leisure activities to invest time and resources into his children's education, extracurricular activities, or personal development. This selflessness extends to emotional support as well. A father may suppress his own emotions or struggles to be a pillar of strength for his family, providing a sense of security and stability during challenging times.

In addition to tangible sacrifices, a father's sacrifice also includes the intangible aspects of parenting, such as patience, understanding, and forgiveness. He may endure sleepless nights comforting a sick child, navigate the complexities of parenting with grace and wisdom, and make tough decisions that prioritize his children's long-term happiness over immediate gratification. These sacrifices often require immense strength and resilience, but they are driven by an unyielding love that transcends any hardship.



A father's sacrifices leave a lasting legacy, shaping the lives of his children and influencing the way they perceive love, responsibility, and sacrifice. They serve as a reminder of the depth of paternal love and the sacrifices made in the name of family. While these sacrifices may not always be acknowledged or appreciated in the moment, they form the foundation of a strong and loving family bond, illustrating the profound impact of a father's selfless devotion.

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# HUMAN NEEDS AND VALUES

Once born, every individual has to take care of the following needs.

## Basic Needs

- a) Food for growth and good health
- b) Sleep for physical and mental relaxation
- c) Sex for reproduction

## Safety Needs

Avoid getting injured. Take care to see that you are not harmed by fire, natural calamities, poisonous substances or accidents.

## Love and affection

It is important that there should be mutual love and affection among family members, leagues and neighbors.

## Recognition, Honour, Appreciation and Status

These are necessary to lead a happy and consenter life.

## Knowledge and Skill

- a) To carry on routine and other activities.
- b) To plan before you act.
- c) To solve problems for a reaching your goals.

## Aesthetic Needs

## Cultural activities

## Self Actualization

To know one self and to find one's position in the society.

It should be possible that every child is taken care of educational career with the help and guidance of parents, teachers and other well wishers. During this process of taking care of the needs, one is expected not to hurt or harm others. One has to learn to live and let live.

In the process of growing into an adult and a responsible citizen, every child has to be taught to understand and follow the norms written or unwritten, the do's and don'ts. It is the responsibility of the parents and guardians, teachers others to teach, monitor every child regarding adhering to these norms and values.

The following values should be inculcated in children during their school and college days.

**1. Unity:** Every child should support, remain united, and share both joy and sorrow with family members. He/she should enjoy togetherness. The child should know that unity and solidarity give solid strength to face any crisis or disaster.

2

## Happiness

s: How to be happy?

How to enjoy

life? Do we need lot

of money, material and

physical comforts to be happy? Do we need praise and costly gifts from others to be happy? Do we need power and status to be happy? We can be happy with what we do and what we get everyday. We can be happy by doing well to others. We can be happy and by sacrificing helping. We can be happy enjoying the beauty of nature.

**3. Simplicity:** Simplicity is a virtue. Simple needs are easily taken care off. If we are simple in our talk behaviour and approach people like us and respect us. By simple living, we can avoid abusing or exhausting our limited resources. We can share space, materials and facilities with others and make them happy.

**4. Humility:** Be polite, be kind and respect others irrespective of their sex, age, occupation, religion, region or economic status.

**5. Trust:** We have to trust our parents, siblings, teachers, friends, relatives, spouse and children. We have to induce trust in anybody with whom we may interact and work. We live to have faith in the system and in good nature of the people around us.

**6. Hope:** One has to be always optimistic and hope that all things will go well. Hope is the light which helps us make efforts to meet our obligation to society, solve problems, reach goal and achieves success. Even in times of crises, distress, personal loss and threat to life and existence we should continue to have hope and induce hope in others too.

**7. Honesty:** Honesty is essential for us to survive, live comfortably with our family and society. We have to be honest in putting our efforts to complete tasks, be honest in our approach to deal with men and society in general. Cheating others, hiding truth for our benefits is a crime.

**8. Co-operation:** Any task, any work, any responsibility becomes easy when we cooperate with others. We have to cooperate and co-ordinate in pooling the resources, physical and mental energy to complete





any task. Lack of cooperation leads to failures and waste of Confrontation leads to destruction.

**9. Freedom:** One has to have freedom to talk, express, opinions and feelings. One should be free to do his work move about live as he / she likes. Simultaneously, we have to allow others to have such should be freedom. Restrictions, lack of freedom and compulsion lead to mental agony.

**10. Love:** One should give top priority and attention for mutual love and affection. Love is divine. Unconditional love brings joy all concerned. We should not hate anybody.

#### **Value Education about Human Needs**

**A. Food:** Food is essential for the growth and functioning of our body. Growing children should be taught to love and respect food they eat. They should know what to eat, what not to eat, how and where to eat. Good food is like hectare (AMRUTHA). Bad food is poison. Good food leads to health, bad food causes illness.

One should follow the norms and values motioned below regarding food:

- ☐ Food should be prepared, preserved and used properly. Maintain cleanliness. Avoid pollution.
- ☐ Food items should not be wasted.
- ☐ Give food to the hungry and the needy feed animals.
- ☐ Share food with friends, relatives and neighbor
- ☐ Do not over eat or under eat.

**B. Sex:** Sex is essential for procreation. Puberty makes a boy or a girl to develop secondary sexual features and also induce sexual desires. Now a day both boys and girls attain puberty between 9-14 years. Because of exposure to media boys and girls are becoming aware of their sexual needs. They get attracted towards each other and show keen interest in sexual expressions. Pre-marital and extra marital relationships, sexual promiscuity are becoming more common than before. There is an alarming tendency to indulge in sex for fun and entertainment. Adolescent boys and girls have to be taught about healthy and safe sexual life.

- ☐ Respect members of the opposite sex. Do not tease them. Do not make fun of them.
- ☐ Strictly avoid pre-marital sex or any kind of sexual activity before getting married.
- ☐ Avoid stimulations or situations that provoke sexual desire.
- ☐ Find out from doctors as to what

normal and healthy sexual expressions and what abnormal and unhealthy expressions are.

- ☐ Strictly avoid dangerous and perverted sexual practices.
- ☐ Learn how to protect yourself from sexual exploitation and sexual assaults.
- ☐ Understand the thin line which separates prema-Love from sex-Kaama
- ☐ Know about happy and healthy marital life. Prepare yourself for parenthood and family life.
- ☐ Strictly stick to the principle of single marriage.

#### **C. Safety Needs:**

- ☐ Identify the possibility of dangerous situations, people, things, actions and reactions within yourself and others that pose threats to one's safety.
- ☐ Try to avoid them or minimize them.
- ☐ Learn to control your anger. Avoid hatredness. Avoid becoming aggressive and violent.
- ☐ Take precautions to safeguard your children. money, valuables, property and status.
- ☐ Avoid people who are selfish or cunning.

**D. Giving and Getting Love:** Love and affection from parents and others are essential to a growing child. While getting love, the child has to learn to reciprocate it. Positive feelings towards everybody around. Selfless love is virtue.

#### **E. Recognitions, Honours, Power and Status:**

Every individual wants to be recognised with special status at home. At the work place and the society he / she lives in people look for honours, awards, rewards, power and position. They want more that what others get. Each one wants to be on top always. Each child has to understand that he / she will get recognition, awards and status only by hard work by being honest, creative and productive, Children have to be told and convinced about the following values:

- ☐ Do not beg, use influence or pressure or demand for recognition. Recognition should come on its own.
- ☐ Does your work sincerely, exhibit your talent or creativity and enjoy doing it.
- ☐ Involve yourself in healthy competition with

others in your area of work and hobbies. Appreciate when your competitors do well. Do not be jealous.

- ☐ Learn to remain satisfied with whatever recognition you get.
- ☐ Avoid developing excess self - pride (Ahankaara) because you get recognition early or more than others. Be humble.
- ☐ Know that many would have contributed directly or indirectly to enable you to get awards. Learn to be grateful to them.

**F. Knowledge Needs:** Knowledge is power. Lack of knowledge and ignorance make us weak and helpless. With proper knowledge we can understand the reality and analyse the problems and take right decisions. Knowledge is like an ocean. There is no limit to learn in life.

- ☐ Keep on learning. Increase your skills. Respect individuals who teach you and help you to learn.
- ☐ Keep your mind wide open to receive any information, views or opinions, make notes and analyse things you come across. Discuss with others.
- ☐ Share your knowledge with others. Oppose blind beliefs and wrong practices. Encourage scientific attitude in others.
- ☐ Use the knowledge and skills you have for other's benefits. Never use them to harm others and the society. Do not exploit the ignorance of a people.

**G. Aesthetic Needs:** Acquire the ability to enjoy beauty and goodness of people and nature. Beautiful things and good people make us feel good and happy even in situations of despair and difficulties. Every child has to be shown and taught to identify and appreciate good things and events in his/her surroundings.

**H. Self Actualization Needs:** After taking care of our daily needs, psycho-social needs, we have to turn our attention to understand our 'SELF'. We have to do continuous introspection with regard to our emotion, successes and failures, our actions and reaction. In times of both pain and pleasures. We have to understand the process of living. Why some people suffer more, why some remain unhappy in spite of good resources? Is there anything beyond death? Is there anything such as a super human force or power? Look at the thoughts and opinions of the past and present thinkers of east and west, north and south. Every individual has to find his / her own answer and opinions, with regard to these questions.

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## **BIT TO QUBIT: HARNESSING THE POWER OF QUANTUM MECHANICS IN COMPUTING**

Quantum mechanics, a branch of physics that deals with the behavior of matter and energy at the smallest scales. It introduces principles such as superposition and entanglement which have profound implications for computing. In classical computing, information is processed using binary bits (either 0s or 1s). These bits form the basis of all classical computations, representing the fundamental units of information storage and manipulation. While quantum computers leverage qubits as the basic unit of information. Qubits, unlike classical bits, can exist in multiple states simultaneously due to the principle of superposition. This means that a qubit can represent both 0 and 1 at the same time, enabling quantum computers to process multiple pieces of information simultaneously. This property enables quantum computers to perform certain calculations much more efficiently than classical computers, especially for tasks involving parallel processing and complex algorithms.

In addition to superposition, qubits can also exhibit another quantum property called entanglement. Entanglement means that the state of one qubit is correlated with the state of another qubit, even if they are physically separated. This property allows quantum computers to perform operations on multiple qubits simultaneously, leading to exponential increases in computational power.

The manipulation and control of qubits are critical challenges in quantum computing. Qubits are highly sensitive to external interference and can quickly lose their quantum properties, a phenomenon known as decoherence. Scientists and engineers are actively researching methods to protect qubits from decoherence and to develop error correction

techniques to ensure the reliability of quantum computations.

The shift from bits to qubits represents a paradigmatic leap in computational power and opens the door to solving problems that are currently intractable for classical computers. Applications of quantum computing span various fields, including finance, logistics, cryptography, optimization problem, drug discovery, material science, and artificial intelligence.

Despite their potential, quantum computers face significant technical challenges, including qubit stability, error correction, and scalability. Research communities are actively working to overcome these challenges and build practical quantum computing systems.

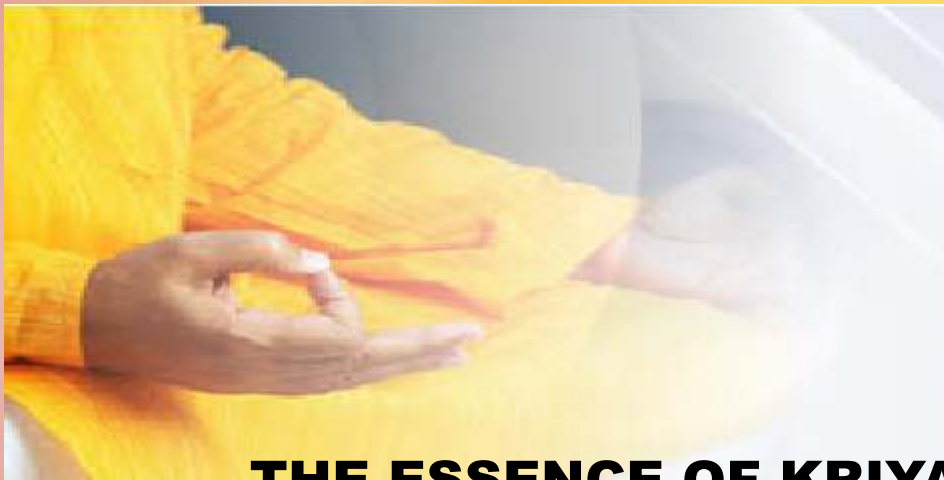
While large-scale, fault-tolerant quantum computers capable of solving real-world problems are still in the experimental stage, the field of quantum computing holds tremendous promise for revolutionizing computation and unlocking new frontiers in science, technology, and beyond.

As quantum computing continues to advance, it holds the promise of transforming industries, accelerating scientific discovery, and addressing some of the most complex problems facing humanity.

**Dr. Gangadhar Purohit**  
**HoD BSH**







## THE ESSENCE OF KRIYA YOGA

The Spiritual discipline of Yoga is very old and is still one of the main forms of *Sadhana*. It is an independent discipline and is competent to achieve the highest good by it self. Many sects rely entirely on Yoga. However, it is not a sectarian discipline, but a universal one and is adopted to some extent by all sects. Its chief merit is that it is practical & free from all dogmas & presuppositions. It therefore, does not conflict with any sect or religion.

The word 'Yoga' is derived from the Sanskrit root *Yuj* which means to join. It is the union of individual soul with the universal soul or else we can say this as the union of the human being with God. The ordinary meaning of the word Yoga is union but it metaphysically means the realization of the identity of the self with Brahman. Yoga aims at the realization of the all-pervasive existence of God. The physical body of a human being is a part of nature. The five senses of the person keep him enchanted and engrossed in the external world; as a result of which he loses the senses of good and evil. Like the fatal fascination of the moth of fire, the five senses drag one to the apparent charms of the external worlds and bind one to the miseries of such attachments. Being irresistibly drawn to the pleasure of the world one loses all moral and ethical values, and evil tendencies get the upper hand. But if the sensory stimulus is stilled and the mind is tuned to divinity, person evolves higher and higher until he transcends animality and rationality, and manifests his inherent divinity. Hence Yoga is the science of mental discipline whose aim is the perfect control of the modifications of consciousness.

KRIYA yoga teaches the method of merging the individual will with the cosmic will by controlling the mind and its modifications thereby attaining liberation. In the word Kriya there are two syllables: Kri & ya. *Kri* means to pursue your work in daily life and *Ya* mean to be ever aware of the invisible god who is abiding in you and is directing and accomplishing work through you.

On the physical plane, Kriya Yoga bestows good health and physical efficiency; on the mental plane concentration, balance of mind and peace. On the spiritual plane, it guarantees liberation from the chain of birth and death and offers eternal bliss, immortality, perfection and everlasting peace. The ultimate objective of Kriya Yoga is not only individual liberation but the transformation of the entire human race. It aims to instill a divine nature and life into the physical, mental and spiritual life of humanity. The simple and easy breath control prescribed in the Kriya technique restores lost equilibrium and paves the way for salvation. The pure oxygen breathed in this process purifies the inner mechanism of the body, activates the limbs and increase appetite. It gives strength and youth to the body and memory, patience, and brilliance to the mind. Sincere practice of Kriya enable one to experience the touch sensation, sound vibration and light-flash of the divinity inside ones own body and helps to elevate the mind into supra mental consciousness.

Thus the word Kriya signifies that you lead your daily life as directed from your brain and at the same time watch the invisible God who inspires your brain to direct. Without the invisible Being, your brain can not function. A dead person can not think because the invisible soul is not there. So it is necessary to remember that each and every thought comes from the invisible self with in. If you perceive that the indwelling self is the sole doer in you; that he himself is functioning in the body, then Self- Realization is attained.

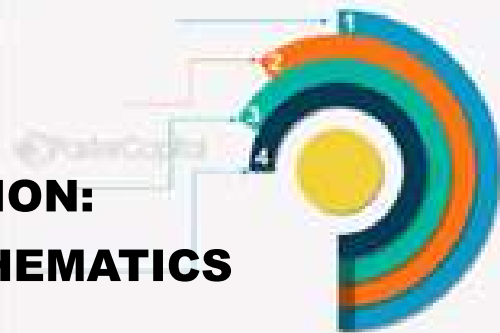
*By the blessings of Gurudev.*

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# THE POWER OF VISUALIZATION: UNVEILING THE BEAUTY OF MATHEMATICS



The significance of visualization in mathematics, a field that frequently favours complex theories and abstract concepts, cannot be emphasized. It functions as a potent instrument that not only improves our comprehension of mathematical ideas but also reveals the natural grace and beauty of the field. The process of creating mental models or representations to help understand mathematical concepts is known as visualization in mathematics. Beyond just manipulating numbers and symbols on paper, it provides a dynamic and captivating approach to investigate mathematical relationships and systems. The ability of mathematics visualization to make difficult topics understandable to students at all levels is one of its main benefits. Graphs, diagrams, and geometric illustrations are examples of visual representations that give abstract concepts a concrete and natural sense. For example, seeing a graphic representation of a curve and its slope at various places helps to make sense of the concept of a derivative. Visualization also helps to establish a stronger link between mathematical ideas and practical applications. Students and mathematicians alike can see the real-world applications of their academic knowledge by turning abstract concepts into visual models. This link between theory and practice improves learning and fosters a deep understanding of the applicability of mathematics in a variety of contexts. Take geometry, for example, where visualization is essential. Students can explore spatial relationships and gain a deeper understanding of the underlying principles by seeing geometric forms, angles, and

transformations brought to life through diagrams and drawings. Through visualization, geometry is transformed from a body of theorems and proofs into a dynamic investigation of the surrounding environment. Visualization not only facilitates comprehension but also stimulates creativity while tackling problems. Mathematicians frequently visualize difficulties in order to formulate creative solutions. Mathematicians can solve problems from a different angle and make significant progress in the discipline when they are able to visualize complex circumstances. The importance of mathematical visualization only grows with the advancement of technology. Virtual reality apps, computer-generated models, and interactive simulations open up new possibilities for understanding mathematical ideas in ways that weren't possible before. These resources not only improve the educational process but also create new avenues for investigation and learning.

In conclusion, it is impossible to exaggerate the value of visualization in mathematics. It acts as a springboard for creativity in problem-solving, a bridge to practical applications, and an entrance to comprehension. We may reveal the inherent beauty and grace that lie under the surface of abstract mathematical notions by embracing and incorporating visualization into the study and practice of mathematics. We are setting out on a trip that will not only deepen our grasp of mathematics but also encourage upcoming generations of mathematicians to push the envelope of what is feasible as we continue to investigate the seemingly endless possibilities of visualization.



# THE ROLE OF TECHNOLOGY IN FUTURE

Over the last 2 to 3 decades, technology has become more and more part of our daily lives, to the point where it has taken over our lives. Technology has played a very crucial part in developing the modern world, from the development of the wheel to the most recent advances in artificial intelligence our lives have gotten simpler, more productive as a result of technological advancements. Notice how our lives are surrounded by gadgets and tech appliances. The PC on your desk, the cell phone next to your bed, the wifi router - all these are the examples of how technology has transformed every aspects of our lives, some for the good and others may not be so good.

## Positive impact of technology:

1. *Better communication*: The advancement of communication is one of the most noticeable benefits of technology to modern civilization. People from all over the world can communicate with one another because of the widespread availability of social media, messaging applications and video conferencing technology.

2. *Enhanced information Access*: with the advancement of the internet, formerly inaccessible knowledge is now at everyone's one's grasp. The internet has made it possible for anybody to gain exposure to new ideas, practices and perspective with only a few mouse clicks.

3. *Education increased*: Because of technological advancements learning is now more convenient and productive than ever before. As e-learning platforms proliferate, students no longer need to be physically present in a classroom to benefit from its content. As a result, students may now study whenever and where ever they like.

## Negative impact of technology:

1. *Reduced social engagement*: while technology has made communication easier, it has also reduced the

need for interpersonal contact. Because of this people are feeling lonely and isolated which can have serious psychological implications.

2. *Screen time increased*: screen time has grown as a result of technological advancement, which can have harmful impacts on both physical and mental health. Eye fatigue, back discomfort, and trouble sleeping.

3. *Privacy issues*: Privacy issues have surfaced as a result of technological advancements, as private information is increasingly mined for profit and political gain.

The state of technology in the future is exciting and dynamic. AI, blockchain networks, robots and cybersecurity are just some of the most significant technological breakthroughs that will alter our world in the next years. Also, technology has potential to opportunities and increase disparity.

It is vital that we, as a society, remain aware of these hazards and take steps to reduce them while still enjoying the advantages that technology provides. The future of technology is unpredictable. A couple of startups are also working on building flying cars-A flying car for all intents and purpose is a drone that is capable of carrying people. There are just few of the amazing technologies that we will have in the coming years. The future is unpredictable and the possibilities are limitless. *What's next? Teleporting? Anything is possible!*

By Palak Shrivastawa



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