THE BYTE STREAM

OFFICIAL NEWSLETTER



FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING
BANDRA - MUMBAI
MOULDING ENGINEERS WHO CAN BUILD THE NATION

DEPARTMENT OF COMPUTER ENGINEERING

2023

ISSUE 5

Vision Mission, PEO's and PSO's

VISION

To be a center of Excellence in Computer Engineering education that will produce self-motivated , and globally competent individuals through holistic development.

Program Specific Outcomes :

- Develop Artificial intelligence and Machine Learning systems.
- Apply cyber security mechanism to ensure the protection of information technology assets.

MISSION:

- Build State-of-art infrastructure that can accommodate cutting-edge technology and is constantly updated in response to the needs.
- To emphasize on experiential learning and holistic development in order to pursue academic excellence and inculcate research aptitude through high-quality research publications.
- Enable the students to foster innovative ideas in pace with the emerging technologies .
- Encourage faculty members to pursue higher education/research and stay abreast with the latest technology.

Program Educational Objectives :

- Apply Computer Science principles and techniques to develop engineering projects in order to achieve client business objectives and/or to conduct fruitful research.
- Demonstrate excellent interpersonal skills and leadership qualities at their workspace and in the society.
- Successfully work in diverse and multidisciplinary teams, communicate effectively , and find innovative solutions to problems.

Newsletter Highlights

Messege from HOD's Desk

Journey At Fr. CRCE
by Khalid Shaikh

Class photos

Student Achievements

Shining Councils

Faculty Achievements

Faculty and Student Articles

Placement and
Internship stats

Closing Thoughts

Message from HOD's Desk



Dr. Sujata Deshmukh
Head of Department
Computer Engineering Department

"Computer science empowers students to create the world of tomorrow."
Satya Nadella, CEO of Microsoft

Dear Students,

Byte stream serves as a platform to keep you up to date with some exciting happenings in the computer engineering department to gear up students, alumni, and faculty. This magazine encourages alumni to reconnect with us, share their unique perspectives, expertise, and success stories to inspire our students and foster meaningful collaborations.

I wanted to share some exciting developments in the field of technology that are shaping the future and opening up new opportunities. Here are a few highlights:

1. Artificial Intelligence (AI) Breakthroughs AI has made significant strides in machine learning, natural language processing, and computer vision. These advancements are being applied in healthcare, autonomous vehicles, and personalized user experiences, among other areas.

Message from HOD's Desk

2. Quantum Computing: It has reached new heights, showing immense potential in solving complex problems that were previously challenging for traditional computers. Researchers have achieved significant milestones in quantum supremacy and error correction, paving the way for real-world applications.

3. Internet of Things (IoT) Innovations: The IoT landscape has expanded rapidly, with countless devices communicating seamlessly. This has led to improved automation, efficiency in industries like manufacturing and logistics, and the emergence of smart cities with interconnected systems.

4. 5G Connectivity: The rollout of 5G networks is transforming communication capabilities with ultra-fast speeds and low latency. This technology opens doors to advancements in augmented reality (AR), virtual reality (VR), autonomous vehicles, and Internet-enabled devices.

5. Sustainable Technologies: The focus on sustainability has spur red innovative technologies aimed at reducing carbon emissions and minimizing environmental impact. Renewable energy solutions, electric vehicles, smart grid systems, and efficient waste management techniques are among the notable developments.

These advancements highlight the rapid progress in technology and its impact on various sectors. To stay ahead, it is crucial to develop skills in these areas. Embrace lifelong learning, explore opportunities for training and education, and engage in research and innovation. We encourage you to stay connected with our magazine as we continue to provide updates on the latest trends and breakthroughs. Your enthusiasm and support are greatly appreciated. We look forward to your involvement in shaping the future of technology.

Dr. Sujata Prashant Deshmukh,
Professor and Head,
Computer Engineering Department

Editors Desk

"Coming together is beginning. Keeping together is progress. Working together is success" ~ Henry Ford

Faculty Incharge

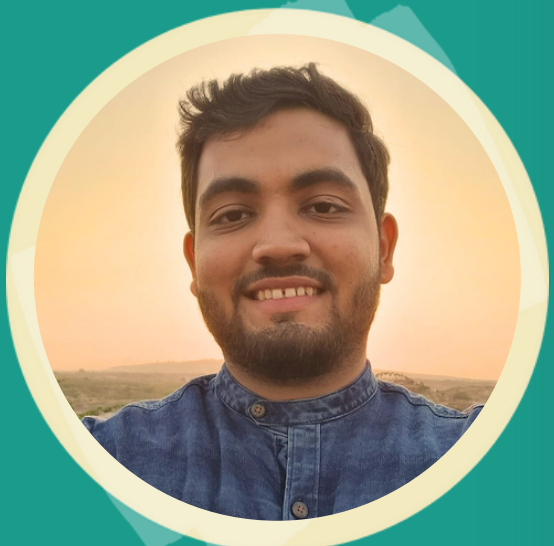


Prof. Sangeeta Parshionikar



Prof. Heenakausar Pendhari

Student Incharge



Jainam Joshi TE CompsB



Dhruv Mayekar SE CompsB

Journey at Fr. CRCE



Khalid Shaikh
2017 Batch

In 2017, I was thrilled to secure admission into Fr. CRCE for a Bachelor's in Computer Engineering based on my JEE Mains rank. However, the financial aspect of my education weighed heavily on my mind, as my family had modest means. Determined to find a way, I reached out to a lot of foundations and gave a lot of interviews. Thankfully, I received scholarships from the Mesco Trust, Aishabai Trust, and Kalsekar Education Trust, easing my financial burden. To cover the remaining college fees, I took on a part-time tutoring job, helping high school students with Mathematics and Physics.

It wasn't easy juggling work and studies, but I remained grateful for the opportunity. I am extremely grateful to be awarded the STULZ-CHSPL Foundation Alumni Scholarship by Fr. CRCE. This scholarship allowed me to quit my part-time job, invest in a new laptop, and dedicate myself fully to my studies.

During the summer break in 2019, I eagerly immersed myself in learning Operating Systems (Unix-based), Machine Learning Algorithms, and React JS. Fueling my enthusiasm, I applied to 5-10 paid internships everyday on Internshala. After two months of persistence, I finally landed a well-paying internship that required expertise in React JS. Fr. CRCE completely supported me by granting me a two-month attendance exemption, recognizing the value of practical experience. Later that year, I took on a leadership role and led a team of six students in participating in SIH 2020, a prestigious competition. We tackled the Cisco Devnet problem statement, creating a Chatbot Assistant for Cruise tourism. Our comprehensive solution, featuring a dynamic knowledge base, stood out and earned us the top prize in the competition.

Amid the challenging times of the COVID-19 pandemic in 2020, I remained determined to further my skills. Through countless interviews, I secured an internship at Swift Robotics, a London-based startup. Working remotely, I developed a mobile application from scratch, enabling users to connect with robots, view area mapping, and autonomously navigate and monitor the robot's movements.

Journey at Fr. CRCE

Impressed by my dedication, the team at Swift Robotics offered me the opportunity to work on the backend, utilizing the Robot Operating System at the Swift Robotics research lab in India. Collaborating with talented individuals from prestigious institutions and international researchers, we focused on developing advanced algorithms and complex robot navigation systems. Together, we built UV disinfection robots that were deployed in hospitals and airports to combat the spread of COVID-19.

Towards the end of 2020, I started preparing for job placements. It was a challenging period of my life as I solved hundreds of coding problems on platforms like HackerRank and LeetCode. Despite giving over 12 interviews and clearing coding tests for multiple companies, I struggled in interview rounds. To improve my speaking skills, I sought mock interview opportunities on Pramp. After a lot of effort and practice, I secured a digital offer from TCS after ranking 273rd in the TCS Codevita 2020 competition. Balancing college academics, a robotics internship, and placement preparations wasn't easy, but I persisted and honed my interview skills. My perseverance paid off when I received the highest package from BrowserStack through campus placements.

Working at BrowserStack, I realized my true passion lay in pursuing further studies and research in Robotics. Determined to fulfill my dream, I embarked on extensive research to find colleges specializing in SLAM and autonomous navigation systems. Georgia Tech emerged as the top choice—a renowned institution ranked sixth overall and first among public schools for computer science on US News. I immersed myself in test preparations, including GRE and IELTS, while dedicating weeks to studying robotics research papers. Crafting a highly technical Statement of Purpose (SOP), I submitted my application, anxiously awaiting a response. To my delight, I received the long-awaited email that read, "Congratulations!"

Today, two years after graduating, I stand proudly as a Senior Software Development Engineer at BrowserStack. Yet, my passion for a career in Robotics burns as brightly as I look forward to studying at Georgia Tech. Reflecting on my journey, I am filled with gratitude for the opportunities I have been given, and I eagerly anticipate what lies ahead.

Class Photos



BE Comps A



BE Comps B

Class Photos



TE Comps A



TE Comps B

Class Photos



SE Comps A



SE Comps B

Student Achievements





TIAA intercollege Hackathon



TE students securing 2nd place at BitNBuild Hackathon



Student Achievements



Patent Published by BE students



TE students securing 2nd place in BitNBuild Hackathon



BE students securing 2nd place in Crescendo Hackathon



TE students winning Robot making competition at KJSCE

Student Achievements



BE students securing 2nd place in Crescendo Hackathon



Participant at TIAA intercollege Hackathon



Winner at PPL cricket tournament



TE Students winning Recursion 4.0 hackathon at RGIT

Student Achievements



SIH hackathon won by BE students



SIH hackathon won by BE students



Crescendo hackathon won by TE students



Crescendo hackathon won by students across different domains

Shining Councils



GDSC with the Best Technical Council of the year award



CSI with the Perfectionist Council of the year award

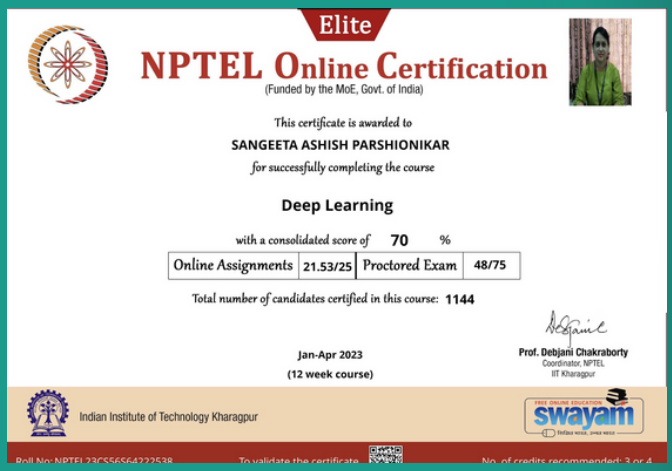
Student Achievements

Sr No.	Achievements
1	Final year Students Bhandari Praveen, Chettiar Rissa secured 1st position in Hackover 3.0 Hackathon 2022 conducted by GDSC Council of Fr. CRCE
2	Final year Students Bhandari Praveen, Chettiar Rissa won Polygon Lumos and LGBTQ+ tracks in Ur-Hackathon 2022 organized by Team Web3ForAll, between 4th and 8th November 2022.
3	Final year Student Bhandari Praveen, won Shardeum track prize in HackNITR 4.0 Hackathon 2022 conducted by NIT Rourkela.
4	Final year Student Ridham Bheda, Won 2nd prize in Katalyst Techfest Final Year Project Presentation
5	Final year Students - Chaudhari Yashaswini, D'souza Dilton secured 1st Place - Dolat Capital Hackathon (June 2022)
6	Final year Students - Chettiar Rissa Secured 1st position in Synergy Hackathon 2022 conducted by Students' Council of Fr. CRCE.
7	Final year Students -D'souza Dilton Gold Medalist in Rifle Shooting - Taluka Level Tournament (December 2022)
8	Final year Student, Abidi Syed Irfan Amjad,Almeida Alan Anthony, Soares Lance Garrick published Idea Indian Patent for Verbal Agreement Signing using Blockchain and speech recognition, March 2023.
9	Chacko Bibin Biju, Winner of SIH 2022, Winner of Hackover 3.0, Runner Up in Code Golf
10	Chacko Bibin Biju, Crescendo Elexathon 2023 - Runner Up
11	Final year Student, Chacko Bibin Biju - Winner, Sangeet Safar(Singing Competition)
12	Final year Students, D'souza Colin, Loomba Ishaan published Idea Patent for Blockchain funding system, December 2022
13	Final year Students,Gini Chacko, Lucas Brendan, won Dolat Hackathon - Runner Up
14	Final year Students Noronha Candida, Gini Chacko won Crescendo Hackathon - Runner Up Feb 2022

Student Achievements

Sr No.	Achievements
15	Final year Student, Mahamuni Aditya Rajendra won Dolat Capital Hackathon 2022 - Finalist
16	Final year Student, Mahamuni Aditya Rajendra Speaker at Fr.CRCE (AI&DS Dept.) for Cloud Computing using Google Cloud and AWS
17	Final year Student, Mahamuni Aditya Rajendra Speaker at Fr.CRCE (Computers Dept.) for Cloud Computing using Google Cloud
18	Third Year Students - Shawn Pimenta Algoholic 1.0 Runner Up (September 2022), Ingenium Winner (September 2022), Bit n Build Hackathon Runner Up (January 2023)
19	Third Year Students - Deon Gracias, Vijay Prajapati, Winner of Crescendo Hackathon 2k23, Fr. CRCE / Winner of Engage Hackathon, Northcap University
20	Final year Students - GUPTA ABHI, Kulal Vinyas Vasu, Mahamuni Aditya Rajendra, published paper, " Affordable Real-Time Heart Rate, ECG & SpO2 Monitoring System Using Internet of Things (IoT)",Nov 2022
21	Third Year Students Huda Ansari, Shreya Palande, Manasvi Patil Secured first place at Recursion 4.0 (24 hours national level hackathon) held at RGIT, Mumbai from 16th & 17th March 2023
22	Third Year Students Naman Chauhan, Second Runner Up in BitNBuild Hackathon in Blockchain domain
23	Third Year Students - Charmi Tank,Shawn Pimenta secured second rank in BIT AND BUILD Hackathon , Fr. CRCE January 28th–29th.
24	Third Year Students - Jaden Dsa,Jonathan Duarte secured 3rd place in BitnBuild hackathon (Blockchain domain).
25	Third Year Students - Oswin Lopes, Reuben Rodrigues secured Third place in algoholic coding competition, Qualified for 3rd round of inter college level coding competition (SemiCode)
26	Winner of TIAA Hackothon Third Year students Nigel Misquitta, Shubham Ojha, Dillon Gonsalves held on 4th May 2023
27	Winner of COSMOSOC, Parsec 2023 Hackathon's "Moisture Minds", Third Year students Shoydon , Priti Vasaikar, Nigel Misquitta, Dillon Gonsalves organized by IIT Dharwad

FDP and Workshop courses done by faculty



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SANGEETA ASHISH PARSHIONIKAR

for successfully completing the course

Deep Learning

with a consolidated score of 70 %

Online Assignments	21.53/25	Proctored Exam	48/75

Total number of candidates certified in this course: 1144

Jan-Apr 2023

(12 week course)

Prof. Debjani Chakraborty

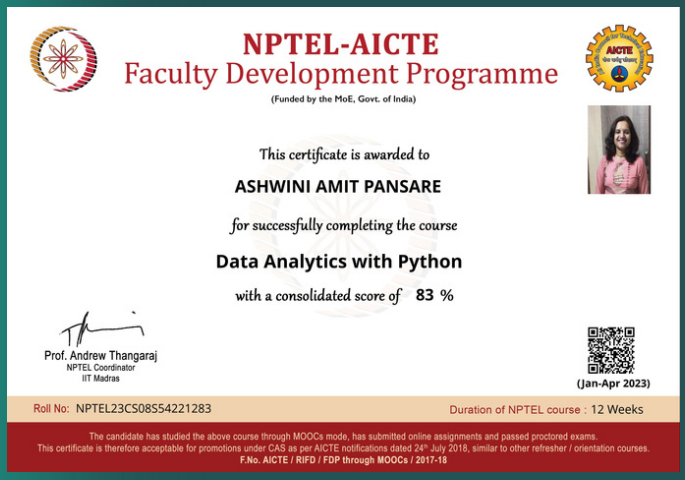
Coordinator, NPTEL

IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Deep Learning Certification with 70% achieved by Prof. Sangeeta Parshionikar



NPTEL-AICTE

Faculty Development Programme

(Funded by the MoE, Govt. of India)

This certificate is awarded to

ASHWINI AMIT PANSARE

for successfully completing the course

Data Analytics with Python

with a consolidated score of 83 %

Prof. Andrew Thangaraj

NPTEL Coordinator

IIT Madras

(Jan-Apr 2023)

Roll No: NPTEL23CS08S54221283

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

Data Analytics with Python Certification with 83% achieved by Prof Ashwini Pansare



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

ANKITA AMBURLE

for successfully completing the course

Privacy and Security in Online Social Media

with a consolidated score of 73 %

Online Assignments	16.33/25	Proctored Exam	56.63/75

Total number of candidates certified in this course: 3697

Prof. Kishore Kothapalli

Professor and Dean (Academics)

IIIT Hyderabad

Jan-Apr 2023

(12 week course)

Prof. Andrew Thangaraj

NPTEL Coordinator

IIT Madras

International Institute of Information Technology, Hyderabad

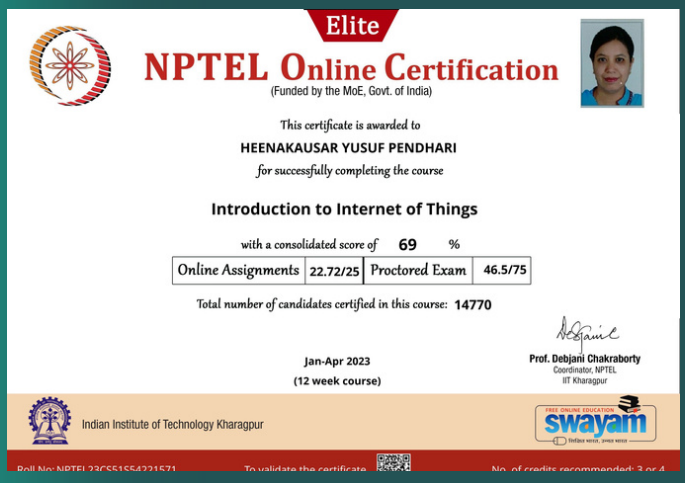
swayam

Roll No: NPTEL23CS13S44231858

To validate the certificate

No. of credits recommended: 3 or 4

Privacy and Security in Online Social Media Certification with 73% achieved by Prof. Ankita Amburle



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

HEENAKAUSAR YUSUF PENDHARI

for successfully completing the course

Introduction to Internet of Things

with a consolidated score of 69 %

Online Assignments	22.72/25	Proctored Exam	46.5/75

Total number of candidates certified in this course: 14770

Jan-Apr 2023

(12 week course)

Prof. Debjani Chakraborty

Coordinator, NPTEL

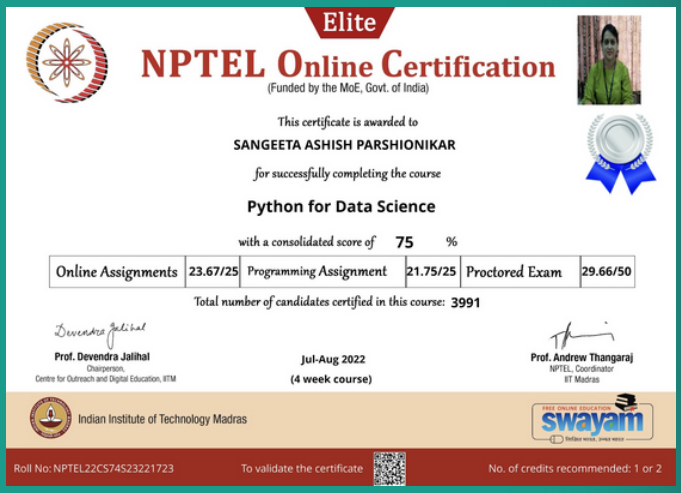
IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Introduction to Internet of Things Certification with 69% achieved by Prof Heenakausar Pendhari

FDP and Workshop courses done by faculties



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

SANGEETA ASHISH PARSHIONIKAR

for successfully completing the course

Python for Data Science

with a consolidated score of 75 %

Online Assignments	23.67/25	Programming Assignment	21.75/25	Proctored Exam	29.66/50

Total number of candidates certified in this course: 3991

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Jul-Aug 2022
(4 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL22CS74S23221723 To validate the certificate No. of credits recommended: 1 or 2

Python for Data Science Certification with 75% achieved by Prof Sangeeta Parshionikar



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

TOP TOPPER 5%

This certificate is awarded to

SANGEETA ASHISH PARSHIONIKAR

for successfully completing the course

Machine Learning

with a consolidated score of 77 %

Online Assignments	25/25	Proctored Exam	52.28/75

Total number of candidates certified in this course: 583

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Jan-Mar 2023
(8 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL23CS11S35200772 To validate the certificate No. of credits recommended: 2 or 3

Machine Learning Certification with 75% achieved by Prof Sangeeta Parshionikar



Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

KRANTI KIRAN WAGLE

for successfully completing the course

Foundation of Cloud IoT Edge ML

with a consolidated score of 88 %

Online Assignments	23.33/25	Proctored Exam	64.5/75

Total number of candidates certified in this course: 1649

Prof. B. V. Ratish Kumar
Chairman, Centre for Continuing Education
IIT Kanpur

Feb-Apr 2023
(8 week course)

Prof. Satyaki Roy
NPTEL Coordinator
IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No: NPTEL23CS65S44231979 To validate the certificate No. of credits recommended: 2 or 3

Foundation of Cloud IOT Edge ML Certification with 88% achieved by Prof Kranti Wagle

NITTT Faculty Achievements


No: 03/2023/1/M2/57841

अखिल भारतीय तकनीकी शिक्षा परिषद्

प्रमाणपत्र

प्रमाणित किया जाता है कि

सुप्रिया शिवनाथ कामोजी

एनआईटीटीटी पंजीयन क्रमांक :20221121706

ने

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल

के अंतर्गत

मॉड्यूल 2 : वृत्तिक आचार नीति और संधारणीयता

को सफलता पूर्वक पूर्ण किया।

All India Council for Technical Education (AICTE)

Certificate

This is to certify that

SUPRIYA SHIVANATH KAMOJI

NITTT Registration No:20221121706

has successfully completed

Module 2 : Professional Ethics and Sustainability

of

National Initiative for Technical Teachers Training

Director NITTTR, Bhopal | Director NITTTR, Chandigarh | Member Secretary AICTE | Director NITTTR, Chennai | Director NITTTR, Kolkata

FEBRUARY 2023

Professional Ethics and Sustainability certification achieved by Prof Supriya Kamoji under NITTT program


No: 03/2023/1/M3/58653

अखिल भारतीय तकनीकी शिक्षा परिषद्

प्रमाणपत्र

प्रमाणित किया जाता है कि

यूनिक भीमराव लोखंडे

एनआईटीटीटी पंजीयन क्रमांक :20202103455

ने

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल

के अंतर्गत

मॉड्यूल 3 : संचार कौशल, मोड और ज्ञान प्रसार

को सफलता पूर्वक पूर्ण किया।

All India Council for Technical Education (AICTE)

Certificate

This is to certify that

UNIK BHIMRAO LOKHANDE

NITTT Registration No:20202103455

has successfully completed

Module 3 : Communication Skills, Modes and Knowledge Dissemination

of

National Initiative for Technical Teachers Training

Director NITTTR, Bhopal | Director NITTTR, Chandigarh | Member Secretary AICTE | Director NITTTR, Chennai | Director NITTTR, Kolkata

FEBRUARY 2023

Communication Skills, Modes and Knowledge Dissemination certification achieved by Prof Unik Lokhande under NITTT program


No: 03/2023/1/M2/56953

अखिल भारतीय तकनीकी शिक्षा परिषद्

प्रमाणपत्र

प्रमाणित किया जाता है कि

यूनिक भीमराव लोखंडे

एनआईटीटीटी पंजीयन क्रमांक :20202103455

ने

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल

के अंतर्गत

मॉड्यूल 2 : वृत्तिक आचार नीति और संधारणीयता

को सफलता पूर्वक पूर्ण किया।

All India Council for Technical Education (AICTE)

Certificate

This is to certify that

UNIK BHIMRAO LOKHANDE

NITTT Registration No:20202103455

has successfully completed

Module 2 : Professional Ethics and Sustainability

of

National Initiative for Technical Teachers Training

Director NITTTR, Bhopal | Director NITTTR, Chandigarh | Member Secretary AICTE | Director NITTTR, Chennai | Director NITTTR, Kolkata

FEBRUARY 2023

Communication Skills, Modes and Knowledge Dissemination certification achieved by Prof Unik Lokhande under NITTT program


No: 03/2023/1/M4/60552

अखिल भारतीय तकनीकी शिक्षा परिषद्

प्रमाणपत्र

प्रमाणित किया जाता है कि

सुजता प्रशांत देशमुख

एनआईटीटीटी पंजीयन क्रमांक :20221121728

ने

राष्ट्रीय तकनीकी शिक्षक प्रशिक्षण पहल

के अंतर्गत

मॉड्यूल 4 : अनुदेशात्मक योजना और सुपुर्दगी

को सफलता पूर्वक पूर्ण किया।

All India Council for Technical Education (AICTE)

Certificate

This is to certify that

SUJATA PRASHANT DESHMUKH

NITTT Registration No:20221121728

has successfully completed

Module 4 : Instructional Planning and Delivery

of

National Initiative for Technical Teachers Training

Director NITTTR, Bhopal | Director NITTTR, Chandigarh | Member Secretary AICTE | Director NITTTR, Chennai | Director NITTTR, Kolkata

FEBRUARY 2023

Instructional Planning and Delivery certification achieved by Prof Sujata Deshmukh (HOD Comps Department)NITTT program

Faculty Achievements – Certifications

Sr No.	Faculty Name	Title of Course	Duration
1	Prof. Monica Khanore	A one-week STTP on Advanced Concepts, Tools & Applications of Blockchain & Securities	4th-9th September, 2022
		A two-day FDP on NLP using Deep Learning	30th September and 3rd October, 2022
2	Prof. Roshni Suresh Padate	"Advance Level Innovation Ambassador Training	July to August 2022
		MOE Innovation Cell and AICTE"	30th September and 3rd October, 2022
3	Prof. Kalpana Deorukhkar	Innovation Ambassador training “Foundation Level” conducted by MoE’s Innovation cell and AICTE	August 2022
		A two-day FDP on “NLP using Deep Learning” conducted by Fr.CRCE, Bandra	30th September and 3rd October, 2022
4	Prof. Wagle Kranti Kiran	NLP using Deep Learning,Fr.CRCE	30/9/2022&3/10/22
		Advance Level Innovation Ambassador Training MOE Innovation Cell and AICTE	July to August 2022
5	Prof. Jagruti Nagaonkar	NLP with deep learning	30 SEP and 3 OCT 2022
		Salesforce fundamentals:Introductory training program on Saas	3 ,4 April 2023
6	Prof. Ashwini Pansare	AICTE Advanced innovation ambassador training	30 contact hours August 2022
		Exploring Agile by doing , living and thinking agile	16th September 2022
		NLP with deep learning (FDP)	30th September and 3 rd October 2022
		Overview of Geographical Information System organised by IIRS, ISRO	3rd Oct -27th Oct 2022

Faculty Achievements - Certifications

Sr No.	Faculty Name	Title of Course	Duration
7	Prof. Supriya Kamoji	Quantum Computing	18th and 19th November
		Introduction to Salesforce	3rd and 4th April
8	Prof. Nagdeote Sushma	A two-day FDP on NLP using Deep Learning	30th September and 3rd October, 2022
		Introduction to Salesforce	3rd and 4th April 2023
9	Prof. Monali Shetty	AICTE Advanced innovation ambassador training of 30 contact hours August 2022	22-23 Date of issue 31-8-22
		FDP on NLP and Deep Learning	30/0/22 and 3/10/22
		FDP on Quantum Computing	18th and 19th Sept, 2022
		1 week ISTE approved FDP on "Quantum Computing"	12-17th Dec, 2022
10	Prof. Sangeeta Parshionikar	FDP on NLP and Deep Learning	30/0/22 and 3/10/22
11	Prof.Heenakausar Pendhari	One month Advance Ambassador training programme by MOE's Innovation Cell and AICTE	30th june-30 th July 2021
		NLP with Deep learning	30-9-22 and 3-10-22
12	Prof. Prajakta Dhamnaskar	FDP on NLP and Deep Learning	30/0/22 and 3/10/22

Faculty Achievements – Certifications

Sr No.	Faculty Name	Title of Course	Duration
12	Prof. Prajakta Dhamnaskar	5 days FDP on "Deep learning application developement, tools and research"	28/02/2023 to 04/04/2023
13	Prof. Lokhande Unik	Introduction to Salesforce	3rd and 4th April 2023
		2 Week Atal FDP on "Digital Forensics and Anti-Forensics"	5 Dec 2022- 16 Dec 2022
14	Prof. Ankita Amburle	A one week STTP on “Robotic Process Automation Design and Development V3.0”	27thJune-1st July, 2022
		A one week STTP on"Social Media Analytics	2 -6 january 2023

Publications

Sr No.	Faculty Name	Publication Details
1	Dr.Sujata Deshmukh	Designing an Interactive Chatbot for Educational Assistance using Rasa Framework,2023 International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT), Bengaluru, India, 2023, pp. 68-74, doi: 10.1109/IDCIoT56793.2023.10053457.
2	Dr.Sujata Deshmukh	Comparison of Age, Gender and Ethnicity Prediction Using Traditional CNN and Transfer Learning, 13th IEEE INTERNATIONAL CONFERENCE ON COMPUTING, COMMUNICATION AND NETWORKING TECHNOLOGIES (ICCCNT) 2022, October 3rd - 5th, 2022
3	Prof. Merly Thomas	ChSO-DNFNet: Spam detection in Twitter using feature fusion and optimized Deep Neuro Fuzzy Network, Advances In Engg siftware Volume 175, January 2023, 103333
4	Prof. Merly Thomas	Combating the Distributed Network Attacks using A Proposed progressive Analyzer based on an Ensemble Learning Framework, 13th International Conference on Computing Communication and Networking Technologies (ICCCNT), Kharagpur, India, 2022, pp. 1-10
5	Prof. Merly Thomas	A Brief Review of Network Forensics Process Models and a Proposed Systematic Model for Investigation
6	Prof. Roshni Suresh Padate	High-level and Low-level Feature Set for Image Caption Generation with Optimized Convolutional Neural NetworkJOURNAL OF TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY 2022
7	Prof. Kalpana Deorukhkar	Optimal Hybrid LSTM-RNN for Image Captioning with Deep Features , International Conference on Embracing Industry 4.0 Technologies for Sustainable Growth (ICEI 4.0), April 2022.
8	Prof. Supriya Kamoji	First Aid and Emergency Assistance Robot for Individuals at Home using IoT and Deep Learning. 7th International Conference on Computing Methodologies and Communication (ICCMC). IEEE, 2023.
9	Prof. Supriya Kamoji	A Framework for Flood Extent Mapping using CNN Transfer Learning. International Journal of Intelligent Systems and Applications in Engineering 10.3s (2022): 150-157.
10	Prof. Supriya Kamoji	Fusion of Multimodal Textual and Visual Descriptors for Analyzing Disaster Response. 5th International Conference on Smart Systems and Inventive Technology (ICSSIT). IEEE, 2023.

Publications

Sr No.	Faculty Name	Publication Details
11	Prof. Supriya Kamoji	Analysis of Flood using GIS Parameters in Context of Sustainable Management. International Conference on Augmented Intelligence and Sustainable Systems (ICAISS). IEEE, 2022.
12	Prof. Jagruti Nagaonkar	Fake Profile Detection on Matrimonial Sites using Random Forest Classifier ,Vol 10,Issue 3,March2023,International Journal of Engineering Research in Computer Science and Engineering (IJERCSE),ISSN : 2394-2320
13	Prof. Ashwini Pansare	Cyber bully detection system. 4th International Conference on smart and sustainable development in Engineering and Technology (PICET 2022) AIP publishing, Vadodara, Gujarat, 21-22 May 2022
14	Prof. Prachi Kunal Patil	ResStorage - Blockchain Based Decentralized Resume Storage Application. IEEE World Conference on Applied Intelligence and Computing (AIC), August 2022
15	Prof. Sangeeta Parshionikar	SkinTypeClassifier , Vol 06, Issue 12, December 2022, International Journal of Scientific Research In Engg and Management, IJSREM, ISSN 2582 3930
16	Prof. Sangeeta Parshionikar	A Chat-bot as a First Responder for Panic Attack, Gradiva Review Journal , Vol 8 Issue 11, 2022 Pg No 253-258
17	Prof. Sangeeta Parshionikar	Remote Breast Cancer Patient Monitoring System: An Extensive Review, Lecture Notes in Networks and Systems, 2023, 558, pp. 117–128
18	Dr. Shelake Vijay Maruti	Cyber Security Threats and Challenges Facing Human Life (1st ed.). Chapman and Hall/CRC, Taylor & Francis, 2022
19	Dr. Shelake Vijay Maruti	A Review of Similarity Matching Over Encrypted Data, ICAST - International Conference on Advances in Science and Technology, IEEE, 2022.

Faculty Interaction with outside World

Sr No.	Faculty Name	Details
1	Dr. Sujata P. Deshmukh	Evaluator for KAVACH2023- Cybersecurity Hackathon evaluation
		Subject Expert for Interview Panel MSSU university
		Subject Expert for conducting the interviews at RGIT
		Members of the Research Advisory Committee (RAC) at PillaiCOE and RGIT
		Reviewer for IEEE Conference #55725 International Conference - 4th International Conference on Communication Systems, Computing and IT Applications (CSCITA-23), SFIT
		Reviewer for 1 st International Conference on Recent Trends in Multidisciplinary Research and Innovation ICRMIR-23, LTCE
		External expert for Pre Synopsis and Research Progress Seminar of PHD research scholars at PCOE
		Expert for Research Progress Seminar of PHD research scholars at RGIT
2	Dr. Ashok Kanthe	Expert as Board of Studies Member at Thakur College of Engineering, Department of IT, Appointed by University of Mumbai (Offline 01/07/2023 and online 09/01/2023)
		Reviewer for 2023, 7th International Conference (IEEE) on Computing, Communication, Control And Automation , PCCOE, Pune
		Expert for Avishkar Project Competition, University of Mumbai (23/12/2023)
		Expert as Department Advisory Board (DAB) at A P Shah College of Engineering, Thane (10/03/2023)
		Session Chair for International Conference at NCRD's Sterling Institute of Management Studies, Nerul, Navi Mumbai (24/04/2023)
		Jury for 36 Hours Digital Campus Hackathon -DCH 2023 at Department of Computer Engineering, VJTI, Matunga, Mumbai (14/01/2023)

Faculty Interaction with outside World

Sr No.	Faculty Name	Details
3	Prof. Sushma Nagdeote	Paper setter December 2022 at DJCOE
4	Prof. Supriya Kamoji	Reviewer for 5th IEEE - International Conference ob"Advances in Science & Technology (IEEE- ICAST-2022)", KJSIEIT Sion, Mumbai
5	Prof. Monali Shetty	Judge for KAVACH2023- Cybersecurity Hackathon evaluation
6	Prof. Unik Lokhande	Reviewer for 5th IEEE - International Conference ob"Advances in Science & Technology (IEEE- ICAST-2022)", KJSIEIT Sion, Mumbai
7	Sangeeta Parshionikar	Reviewer for 5th IEEE - International Conference ob"Advances in Science & Technology (IEEE- ICAST-2022)", KJSIEIT Sion, Mumbai
		Reviewer for 4th International conference on Communication systems, computing and IT apllications (CSSiTa - 2023), SFIT, Borivali, Mumbai
		Editorial Board Member , Medicon Open access international Scientific Publication
8	Prof..Heenakausar Pendhari	Paper setter December 2022 & May 2023 at K.J Somaiya, Sion.
9	Ashwini Pansare	Paper setting at DJ Sanghavi COE
10	Dr. Vijay Shelake	Invited as a Examiner for Technical poster competition under CSI student chapter organized by Department of Computer and Information Technology on 15th April 2023 at Shivajirao S. Jondhale College of Engineering, Dombivili(W)
11	Ankita Amburle	Reviewer for IC-ICN 2023 International Conference on Intelligent Computing and Networking Organised by Thakur college of Engineering and Technology

Faculty Patents

Sr No.	Faculty Name	Patent Title	Catogory /Type	Patent Number - Office
1	Dr. Sujata Deshmukh	IOT AND ARTIFICIAL INTELLIGENCE BASED FRUIT RECOGNITION, CALORIE ESTIMATION AND SUGGESTION FOR HEALTHY LIFE USING DEEP LEARNING ALGORITHMS	ORDINARY APPLICATIO N	APPLICATION REF NUMBER-202241051449, -INDIAN PATENT OFFICE,
2	Dr. Sujata Deshmukh, Prof. Supriya Kamoji	FLOODKNOW: A AI BASED HYBRID SYSTEM FOR FLOOD SEVERITY PREDICTION BASED ON LEVERAGING BOTH TEXTUAL AND VISUAL FEATURES USING DEEP NEURAL NETWORKS.	ORDINARY APPLICATIO N	APPLICATION REF NUMBER-202221070479, -INDIAN PATENT OFFICE,
3	Dr. Sujata Deshmukh	FOOTBALL THROWER	DESIGN PATENT	DESIGN NO. : 375204-001, -INDIAN PATENT OFFICE,
4	Dr. Sujata Deshmukh	ARTICLE FOR PRINTING 3D PARTS USING ELECTROCHEMICAL DEPOSITION	DESIGN PATENT	DESIGN NO. : 374640-001
5	Prof. Monali Shetty	BLOCKCHAIN BASED SYSTEM FOR PROJECT FUNDING AND CSR FUNDING	UTILITY PATENT	APPLICATION REF NUMBER-202221060823, -INDIAN PATENT OFFICE,
6	Prof. Sangeeta Parshionikar	VERBAL AGREEMENT SIGNING USING BLOCKCHAIN & SPEECH RECOGNITION	UTILITY PATENT	APPLICATION REF NUMBER- 202321015188, -INDIAN PATENT OFFICE,
7	Prof Kalpana Deorukhkar	DETECTION OF VIDEO DULICATION & INTEGRITY VERIFICATIONUSING BLOCKCHAIN	UTILITY PATENT	APPLICATION REF NUMBER- 202321020315A

Departmental MOU's

Sr No.	Company Name	Date of Agreement	Purpose and Outcome
1	Suven Constants & technology Pvt.Ltd	16/2/2023	TRAINING ,INTERNSHIP AND MENTORSHIP FOR ENGINEERING STUDENTS
2	Indian Institute of Remote Sensing (IIRS) Outreach Programme	11/08/2022	FR. CONCEICAO RODRIGUES COLLEGE OF ENGINEERING IS THE NODAL CENTER FOR IIRS-ISRO OUTREACH PROGRAMME FOR ONLINE, OFFLINE, LIVE & INTERACTIVE COURSES OFFERED BY IIRS-ISRO DEHRADUN FROM 16 TH AUGUST 2022.TO GIVE THE STUDENTS OPPORTUNITY TO ENROL IN VARIOUS CERTIFICATION COURSES IN REMOTE SENSING AND GEO-SPATIAL TECHNOLOGY.
3	Crypto University	8/8/2022	AS A PART OF INDUSTRY ACADEMIA INTERACTION,IT HELPS THE STUDENTS TO GET INSIGHTS INTO THE FAST GROWING FIELDS OF BLOCKCHAIN,METAVERSE AND DIGITAL LANDSCAPE BY IMPARTING REAL TIME HANDS –ON AND INDUSTRY DRIVEN SKILLS AND KNOWLEDGE.THIS THEREBY ENHANCES THE CAREER OPPUTUNITIES FOR STUDENTS IN THE FIELD OF BLOCKCHAIN.

ISRO-IIRS Certifications

Sr No.	Names	Course Title
1	Prof. Ashwini Pansare	108 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GEOGRAPHICAL INFORMATION SYSTEM
2	Prof. Kranti Wagle	110 IIRS OUTREACH PROGRAMME ON RS AND GIS APPLICATIONS IN NATURAL RESOURCE MANAGEMENT
3	Prof. Heenakausar Pendhari	107 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GLOBAL NAVIGATION SATELLITE SYSTEM
4	Sahil Shaikh	107 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GLOBAL NAVIGATION SATELLITE SYSTEM
5	Ayukshi Rane	107 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GLOBAL NAVIGATION SATELLITE SYSTEM
6	Aarush Verulkar	107 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GLOBAL NAVIGATION SATELLITE SYSTEM
7	Janvi Naik	107 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GLOBAL NAVIGATION SATELLITE SYSTEM
8	Alex Raj	107 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GLOBAL NAVIGATION SATELLITE SYSTEM
9	Omkar Surve	108 IIRS OUTREACH PROGRAMME ON OVERVIEW OF GEOGRAPHICAL INFORMATION SYSTEM
10	Ayukshi Rane	112 IIRS OUTREACH PROGRAMME ON GEO-DATA SHARING AND CYBER SECURITY
11	Glen Rodrigues	112 IIRS OUTREACH PROGRAMME ON GEO-DATA SHARING AND CYBER SECURITY
12	Unnati Kotian	112 IIRS OUTREACH PROGRAMME ON GEO-DATA SHARING AND CYBER SECURITY
13	Omkar Satpute	112 IIRS OUTREACH PROGRAMME ON GEO-DATA SHARING AND CYBER SECURITY
14	Unnati Kotian	113 IIRS OUTREACH PROGRAMME GEODATA PROCESSING USING PYTHON
15	Chhand Chaughule	113 IIRS OUTREACH PROGRAMME GEODATA PROCESSING USING PYTHON
16	Slayde Sequeira	113 IIRS OUTREACH PROGRAMME GEODATA PROCESSING USING PYTHON
17	Aston Castelino	113 IIRS OUTREACH PROGRAMME GEODATA PROCESSING USING PYTHON

Faculty Articles 5G Technology



Dr. Ashok Kanthe
Associate Professor

5G technology having theoretical peak speed of 20 Gbps and the peak speed of 4G is only 1 Gbps. 5G promises lower latency and improve the performance of different applications like business, online gaming, videoconferencing and self driving cars.

4G LTE which is earlier generations was focused on connectivity. 5G takes connectivity to the next level by delivering connected experiences from the cloud to customer. The 5G network will also focus on mobility and seamless open roaming capabilities between cellular and Wi-Fi access.

The new Wi-Fi 6 wireless standard shares traits with 5G and improve performance. Wi-Fi 6 radios can provide better geographical coverage and lower cost. Wi-Fi 6 radios is a software-based network with advanced automation.

5G technology should improve connectivity in rural areas and in cities where demand can be increases today's capacity with 4G technology. New 5G networks will also have a dense and distributed-access architecture. It move data processing closer to the edge and the users to enable faster data processing. 5G technology will add advances throughout network architecture. 5G New Radio, the global standard for a more capable 5G wireless air interface and cover spectrum which is not used in 4G. New antennas in 5 G will incorporate technology known as massive MIMO (multiple input, multiple output) having multiple transmitters and receivers to transfer more data at the same time. 5 G technology is designed to support a converged, heterogeneous network combining licensed and unlicensed wireless technologies. In 5Garchitectures networking functionality is managed through software rather than hardware. This architecture enables advancements in virtualization, cloud-based technologies, and IT and business process automation. This architecture is flexible and to provide anytime, anywhere user access. 5G networks can create network slices which enable network administrators to dictate network functionality based on users and devices.

“The Convergence of Blockchain and AI: Unlocking Synergies and Transforming Industries"



Prof. Monali Shetty
Assistant Professor

The convergence of blockchain and artificial intelligence (AI) has the potential to reshape industries, enabling new levels of transparency, security, and efficiency. This article explores the intersection of blockchain and AI technologies, highlighting how their integration can revolutionize various sectors, including finance, healthcare, supply chain, and more. By leveraging the strengths of both technologies, organizations can unlock synergies and create innovative solutions that address complex challenges and drive digital transformation.

- Enhancing Data Privacy and Security: Discuss how blockchain and AI can work together to address data privacy and security concerns. Highlight the decentralized nature of blockchain, which can ensure data integrity, immutability, and transparency. Explore how AI can leverage blockchain's secure infrastructure to process and analyse data while maintaining privacy and protecting sensitive information.
- Trustworthy Data Sharing and Collaboration: Explain how the convergence of blockchain and AI can facilitate secure and efficient data sharing and collaboration across organizations and industries. Showcase examples of blockchain-based platforms that enable data marketplaces, where AI algorithms can access trusted and verified data sources while ensuring data ownership and consent.
- Improving AI Model Transparency and Explainability: Address the growing concern over the lack of transparency and interpretability of AI models. Discuss how blockchain can provide a decentralized and auditable ledger to track the training data, model parameters, and decision-making processes. Highlight the potential of blockchain to enhance the explainability and accountability of AI models, leading to increased trust and adoption.

- Federated Learning and Data Monetization: Explore the combination of blockchain and federated learning, a distributed AI training technique that allows models to be trained locally on edge devices without sharing raw data. Discuss how blockchain can facilitate secure and fair data monetization, where individuals have control over their data and can contribute to AI training while retaining ownership.
- Smart Contracts and AI Automation: Explain how smart contracts, programmable agreements executed on blockchain, can enable automated and trustless interactions between AI systems and various stakeholders. Discuss the potential applications in areas such as autonomous vehicles, supply chain management, and decentralized finance, where AI algorithms can autonomously execute transactions and enforce predefined rules.
- Overcoming Scalability and Efficiency Challenges: Address the scalability and efficiency challenges of both blockchain and AI. Discuss potential solutions, such as off-chain computation and layer-two solutions, that can enhance the performance of blockchain networks for AI processing. Explore AI techniques, including federated learning and edge computing, that can reduce the computational burden and enhance the scalability of AI algorithms.
- The convergence of blockchain and AI holds immense potential to drive innovation, transparency, and efficiency across industries. By combining the security and transparency of blockchain with the advanced capabilities of AI, organizations can unlock new opportunities and address complex challenges. However, it is essential to navigate the technical and regulatory considerations associated with this convergence and ensure responsible development and implementation. As blockchain and AI continue to evolve, their integration will shape the future of industries, revolutionizing processes, and enabling novel applications that were once unimaginable.

Internet of Medical Things and its role in Healthcare



Prof. Sangeeta Parshionikar
Assistant Professor

Internet of Medical Thing (IoMT) is the most emerging era of the Internet of Thing (IoT), which is exponentially gaining researchers' attention with every passing day because of its wide applicability in Smart Healthcare systems.

Advances in the field of the Internet of Things (IoT) in terms of communication protocols, sensing technologies, computing capabilities, next-generation wireless technologies, big data and AI techniques, and on-device, edge, cloud processing have created a paradigm shift and generated a wide range of potential opportunities for a new major field known as the Internet of Medical Things (IoMT).

Healthcare is becoming more expensive and at times even unaffordable. IoMT solutions have what it takes to make the industry services cheaper by preventing serious diseases, eliminating the need of personal checkups, providing affordable means of continuous health monitoring, and much more.

The IoMT will assist doctors, nurses, public health officials, and patients in monitoring, identifying, educating, and directing them to receive the proper medical care as well as ensuring the quick and accurate dissemination of data in a controlled situation. It is an interconnected structure of medical devices, software applications, and healthcare systems and services that transmit real-time data via networking technologies. An example of such a “thing” within the IoMT system can be a heart rate monitor that sends patients’ data to the hospital’s cloud software where a physician can review it right away.

The connected medical devices cybersecurity, Interoperability, Device mobility, Licensing & regulations, Improving the Adoption Scale and Need for Advanced Analytics are few most dangerous IoMT challenges for medical device industry.

The Global Internet Of Medical Things (IoMT) Market Size is valued at 65.72 billion in 2022 and is predicted to reach 357.35 billion by the year 2031 during the forecast period for 2023-2031.

Big Data Integration



Dr. Vijay Shelake
Assistant Professor

Now-a-days, the term Big data has acquired the significance with the increasing creation of records, diverse storage forms and their size. Traditional data integration is the process of collecting the data scattered in two or more database schemas. Big data integration in broad sense deals with unifying the semi-structured, structured and unstructured databases. The emerging trends and applications of Big data integration includes the different sectors of healthcare, finance, electronics, manufacturing and so on.

For example, the patient records can be stored in multiple repositories like hospitals, laboratories, pharmacy/medical stores and various medical agencies. Integrating these records will surely lead to effective analytics with better patient treatment and care. However, integrating records from variety of huge databases becomes difficult because of the challenges such as storage format variations, data value conflicts, scalability, efficiency, quality and privacy. The various steps of Big data integration involves: cleaning, record linkage and fusion. The task of data cleaning involves handling errors and missing values, removing duplicates and unwanted values. The second crucial step is record linkage, which includes the linking of data from many sources that relates to the same entity. The final step of data fusion consists of combining the linked data and store it in the merged database. Hence, in the world of continuous generating data, the big data integration will definitely result in fruitful information, support interoperability among different data source, support research and analytical tasks.

Machine learning: Overview of Federated Learning



Prof Ankita Amburle
Assistant Professor

Federated learning is a distributed approach to machine learning where multiple devices or entities collaboratively train a shared model without exchanging their raw data. Instead of sending data to a centralized server, the model is sent to the devices or entities, and the training process takes place locally on each device. The updated model parameters are then aggregated to improve the global model, and this process is iterated to further refine the model.

Federated learning has gained attention due to its potential for addressing privacy concerns and data ownership issues. With federated learning, sensitive user data remains on the local devices, reducing the risks associated with data breaches or unauthorized access. This makes it particularly relevant in applications where data privacy is crucial, such as healthcare, finance, and IoT devices. Researchers and developers are actively exploring various aspects of federated learning, including methods for efficient aggregation of model updates, handling non-IID (non-identically distributed) data, improving security and privacy protocols, and developing frameworks and tools to simplify the implementation of federated learning algorithms. Federated learning holds the promise of enabling collaborative machine learning while preserving data privacy and security, and it is an area of ongoing research and development in the field of machine learning. Federated learning is particularly relevant for mobile devices and IoT devices, where privacy and limited network connectivity are significant concerns. It allows models to be trained locally on the devices without sharing sensitive data, enabling personalized experiences and improved device performance without compromising privacy. In federated learning, there is no direct exchange of raw data between participants. Instead, only model updates or gradients are transmitted and combined to update the global model. This preserves data privacy and security, making federated learning suitable for scenarios where data cannot be easily shared or centralized. Both distributed machine learning and federated learning involve training models in a distributed manner, but the specific mechanisms and approaches differ.

AI vs. Humans: Embracing the Future Together



Candida Noronha
BE Comps B 2023

In the realm of technological advancements, there is no concept more intriguing and controversial than that of artificial intelligence (AI). From science fiction novels to Hollywood blockbusters, the idea of intelligent machines that can replicate or surpass human capabilities has captured the imagination of millions. But is this fantastical notion of AI replacing humans' mere fiction, or could it become a startling reality? Let's explore the potential impact of AI on various aspects of our lives, including work, creativity, and even emotions.

AI at Work: A Revolution or a Threat?

One of the most pressing questions surrounding AI is its potential impact on the workforce. Will intelligent machines gradually replace humans, leading to widespread unemployment and social unrest? While some fear an impending job crisis, history has shown that technological advancements tend to create new opportunities rather than eliminating jobs entirely.

AI has already begun to transform industries such as manufacturing, healthcare, and transportation. Machines can perform repetitive tasks with unmatched precision and speed, leading to increased productivity. However, there are certain areas where human skills such as creativity, critical thinking, and emotional intelligence still reign supreme.

Rather than replacing us, AI has the potential to augment our capabilities. By automating mundane tasks, AI frees up time for humans to focus on higher-value work. Moreover, the symbiotic relationship between humans and AI can result in more efficient decision-making, improved customer service, and enhanced innovation.

Ethical Considerations and the Future of Humanity

As AI continues to evolve, it raises significant ethical questions that demand careful consideration. The development of autonomous weapons, privacy concerns, and biased decision-making are just a few of the challenges that society must address.

The potential for AI to replace humans also sparks philosophical debates regarding the definition of humanity. What sets us apart from machines? Is it consciousness, emotions, or our ability to reflect on our own existence? As AI advances, we must define and uphold our core values, ensuring that the path we tread aligns with our ethical and moral principles.

Conclusion: Coexisting in a New Era

The notion of AI replacing humans is a complex and multifaceted issue. While AI's advancements are undeniable, the fear of complete human obsolescence seems unlikely. AI has the potential to augment our capabilities, transform industries, and unlock new levels of human creativity. Rather than being adversaries, humans and AI can coexist in a symbiotic relationship, leveraging their respective strengths.

The future is not a battleground between humans and machines; it is a collaboration between human ingenuity and artificial intelligence. We should view AI as a tool that can enhance our capabilities and empower us to tackle the grand challenges of the future. By embracing the potential of AI while maintaining our uniquely human qualities, we can shape a future where humans and AI coexist, creating a society that thrives on collaboration and innovation.

"The future lies not in AI replacing us, but in AI enabling us to reach new heights"

Blockchain Critic: An 'All-inclusive' Innovation?



Jesica D'souza
BE Comps B 2023

Blockchain alludes to the innovation that works on decentralization and transparency. It makes it simple to record and analyze exchanges over numerous computers or hubs without the requirement for a central administrator. Initially related with cryptocurrencies like Bitcoin, blockchain innovation is broadly utilized in numerous businesses, tracking funds, supply chain administration, healthcare, and voting. Benefits incorporate upgraded security, straightforwardness and productivity.

Blockchain technology has brought many controversies into critics since its inception. Scalability is a major issue as networks like Bitcoin and Ethereum struggle to maintain high transaction volumes, causing slow confirmation times and high costs. Another controversy concerns the high energy use by some blockchain networks. The computation required for proof of work (PoW) algorithms uses a lot of energy, especially that used by Bitcoin. Therefore, the environmental impact of blockchain energy is a growing concern in terms of carbon footprint and sustainability, especially if fossil fuels are used.

Privacy and anonymity are also problems for blockchains. When technology becomes transparent and immutable, it raises personal concerns. The open and stable nature of the blockchain business increases the risk of accessing and disclosing personal information and data exchange. Blockchain technology has also been criticized for its involvement in crime, particularly its use in cryptocurrencies. The volatile nature of the blockchain industry has attracted criminals and raised concerns about money laundering, tax evasion and illegal web transactions.

It is imperative to know that blockchain isn't an *'all-inclusive'* technology and has limitations. Any application is ought to carefully consider variables such as execution, utility, and security concerns. Executing the blockchain requires a full appraisal of its achievability, considering trade offs and application-specific issues.

While blockchain innovation is promising and has demonstrated value in certain circumstances, it is imperative to assess its appropriateness on a case-by-case premise and confirm the set issue that emerges.

Augmented Reality: Where fiction gets a new dimension



Winster Pereira
SE Comps A

Welcome to the world of Augmented Reality (AR), where fiction gets a new dimension. In this article, we'll explore the fascinating realm of AR, its origins, and its applications in various fields. Whether you're curious about its potential in healthcare, entertainment, tourism, or education, we've got you covered with exciting examples and insights. Get ready to delve into a world where real and virtual merge seamlessly.Augmented Reality (AR) is a technology that combines real and virtual worlds in real-time interaction.

It enhances our surroundings by overlaying digital information or virtual content onto the real world, creating an immersive and interactive experience. By capturing the real world, modeling the virtual world, and projecting digital information onto a target, AR transforms our perception and interaction with the environment.

Discover how Augmented Reality is revolutionizing various industries and enriching the end-user experience. From enhancing medical visualization and enabling real-time surgeries to engage audiences in interactive television experiences, AR has opened up a world of possibilities. Unleash your imagination as we explore the applications of AR in tourism, where you can virtually visit any place and access comprehensive information. Additionally, AR is transforming education by allowing learners to visualize complex concepts in a captivating and interactive way.

AR has revolutionized the healthcare sector by enabling real-time visualization of medical information and patients within the same physical space. Surgeons can use AR to overlay critical information during surgeries, enhancing precision and reducing risks. Medical apps like EyeDecide simulate the impact of specific conditions or medicines on a person's vision using a camera, providing valuable insights for both healthcare professionals and patients.

AR has tremendous potential in education, transforming the way students learn and engage with complex concepts. By leveraging AR technology, platforms like AugThat! enable young learners to visualize invisible phenomena such as magnetic fields and electric fields.

Industrial Visit

Industrial Visit to Aiipltech Pvt. Ltd

An industrial visit to Aiipltech Pvt Ltd., was organized by Department of Computer Engineering on 4th February 2023. Aiipltech Pvt Ltd., situated at Vashi Navi Mumbai, is a system integrator for setting up of the most advanced and innovative state of the Art Center of Excellence- providing system and solution for higher technical education. It is the one stop source for systems and solution in civil engineering, Material testing and technical education.





Orientation of Second Year Students

SE Orientation Computers Division A & B conducted on 29th of July 2022.



First Year Orientation Program





FE orientation was conducted on 14th November 2022.
Head of the Department, Dr.Sujata Deshmukh addressed the students about department insights, various opportunities for students through different councils, internships, placement activities etc. IQAC head
Dr.Sunil Surve, discuss the academic related activities which are conducted throughout the year.

Parents Teacher's Meeting



Dr. Sujata Deshmukh, Head of Dept told the parents of 2nd year students the measures taken the institute for the holistic development of the students.

Dr. Sunil Surve emphasized the importance of the NBA and NAAC process and deliberated on the Quality Development in the department. He further spoke about the placement, entrepreneurship and higher education opportunities and about the workshops and seminars conducted to help the students in that regard.



Student Development Program

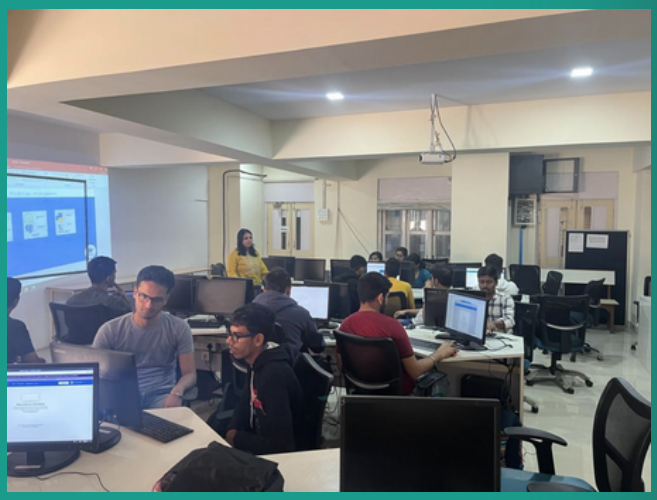
"Industry Expectations from Engineering Graduates" , conducted by Dr Merlyn Michael D'Souza



"How to write technical paper" conducted by Dr. Ashok Kanthe



"Advance Cloud Computing - Docker", conducted by Prof Ankita Amburle



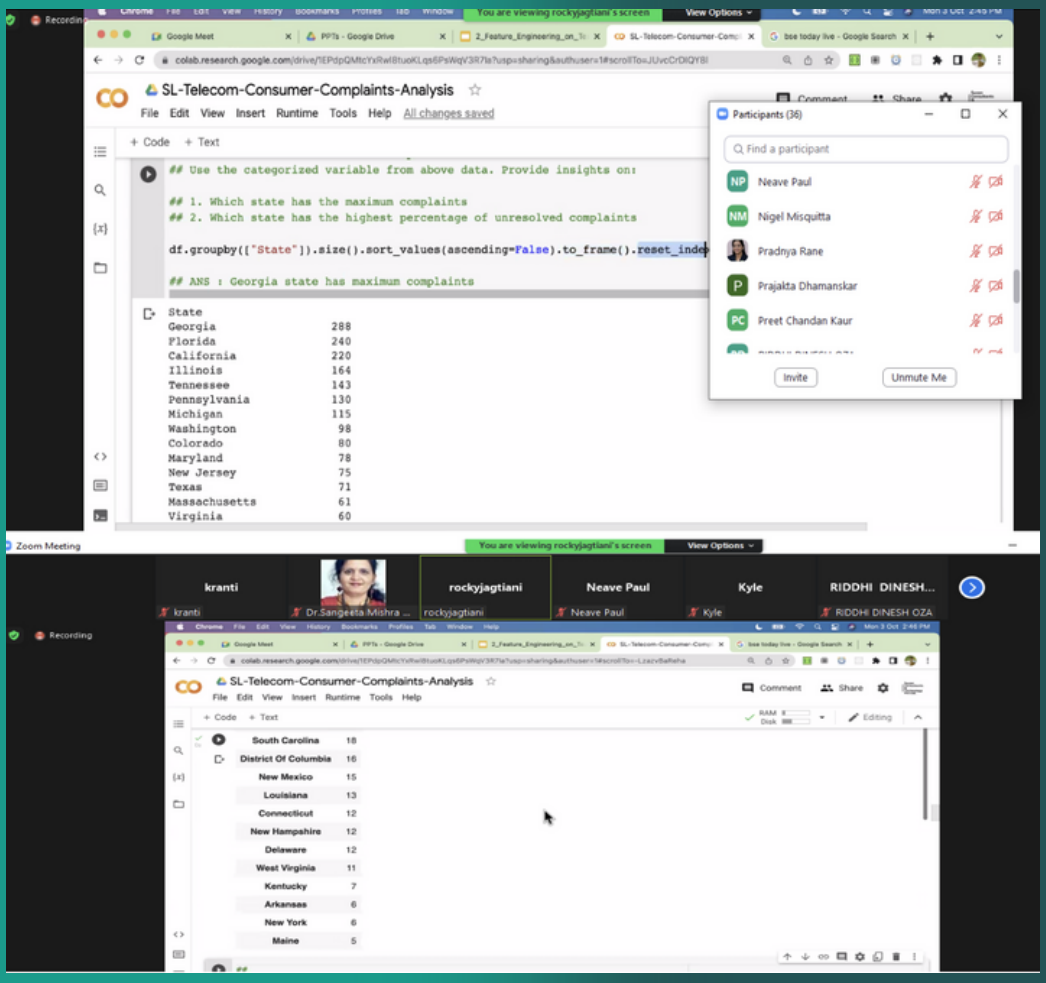
"Higher Education Opportunities in Europe through Funding Scheme", conducted by Dr. Ashok Kanthe



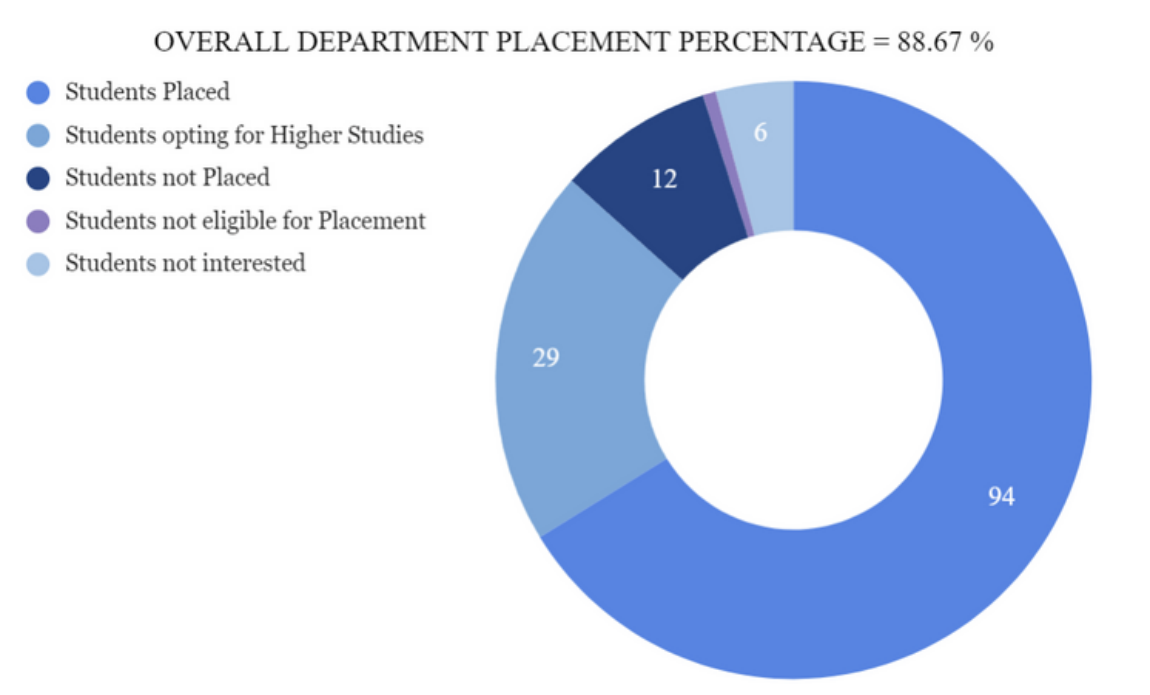
Student Development Program

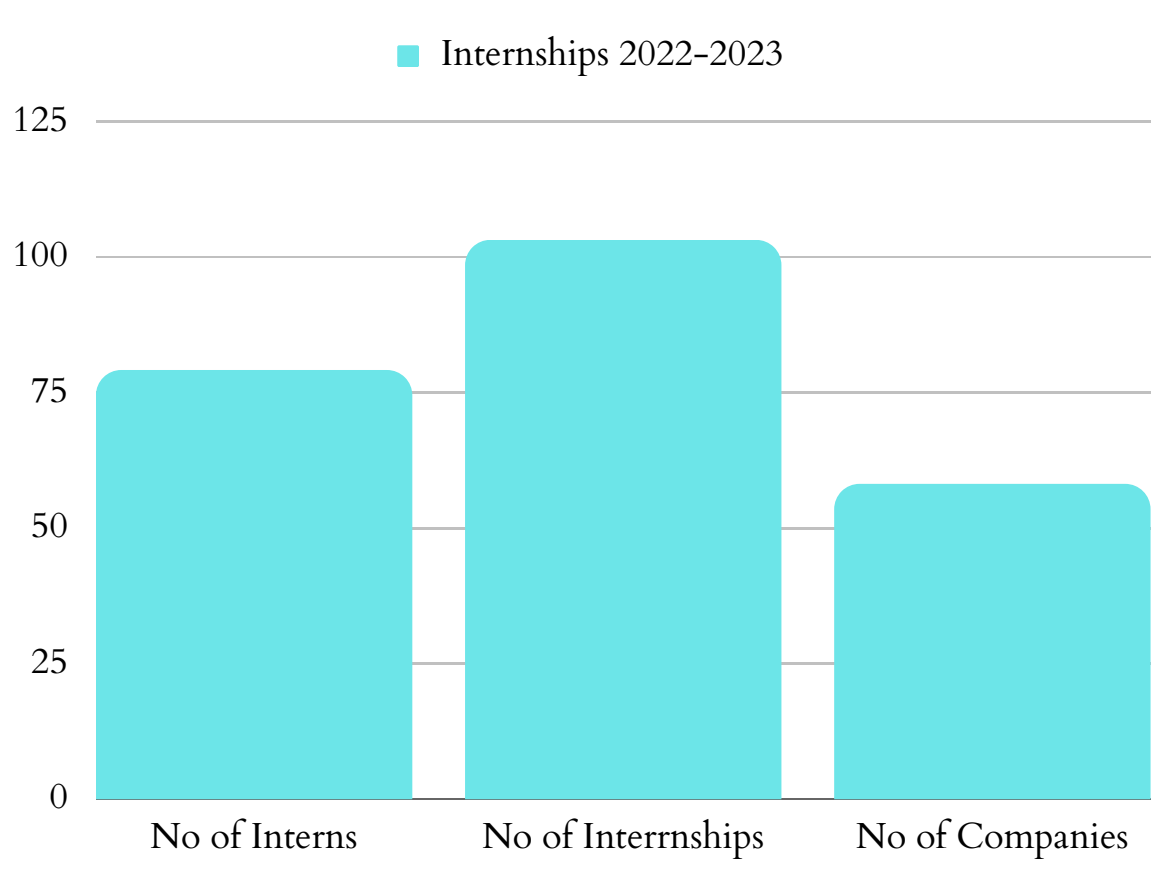
Mr. Rocky Jagtiani took a session on NLP using Deep Learning which was convened by Prof. Sujata Deshmukh (HOD Comps Department)





Placement and Internship Stats





Placement Highlights









Students going for Higher Studies

Sr No.	Student Name	University Admitted to	Course
1	Chris Jackson Fernandez	UNIVERSITY OF CALIFORNIA,DAVIS	MS (COMPUTER SCIENCE)
2	Yameen Tanveerhusain	UNIVERSITY OF WINDSOR	MSC-COMPUTER SCIENCE
3	Rahul Santosh Shinde	UNIVERSITY OF SOUTHERN CALIFORNIA	MS COMPUTER SCIENCE (ARTIFICIAL INTELLIGENCE)
4	Sakshi Sunil Ghadigaonkar	RUTGERS UNIVERSITY	MS COMPUTER SCIENCE (ML)
5	Shorn Nelson Correia	FANSHAWE COLLEGE, LONDON	BIA1B - BUSINESS AND INFORMATION SYSTEMS ARCHITECTURE,
6	Yash Santosh Khasgiwala	LUDDY SCHOOL OF INFORMATICS, INDIANA UNIVERSITY	DATA SCIENCE MS RESIDENTIAL PROGRAM
7	Yohann Vijaykumar Nadar	UNIVERSITY COLLEGE DUBLIN (UCD)	MSC COMPUTER SCIENCE
8	Aniruddha Mahesh Chaudhari	CLEVELAND STATE UNIVERSITY	M.I.S. INFORMATION SYSTEMS.
9	Dion Trevor	JOHNS HOPKINS UNIVERSITY	MS (COMPUTER SCIENCE)
10	Swini Rodrigues	NORTHEASTERN UNIVERSITY, BOSTON	MS (INFOATION SYSTEM)

Closing Thoughts

"Learning Gives Creativity, Creativity Leads To Thinking, Thinking Provides Knowledge, And Knowledge Makes You Great."
Dr. APJ Abdul Kalam

Dear dedicated readers, we hope you liked exploring our department and reading articles based on cutting-edge technology. This issue provides you with a strong foundation from which to view all the events that took place throughout the year. Achievements of students and staff, numerous technical club activities, and their fantastic accomplishments. We feel honoured to highlight the outstanding accomplishments and achievements of our students and faculty, who have worked persistently in a variety of sectors such as research and development, patents, and much more.

We at FR.CRCE encourage students to think creatively, as seen by their successes in a variety of activities. We highly appreciate the team efforts. This Newsletter is the outcome of great team work , as we believe in "Teamwork is the key to success".

We also thank all the faculty members, staff, and students who have been helpful and cooperative while the newsletter was under process. We hope you enjoy reading this issue of our newsletter and learn something new while getting a glimpse into the future. We respect your opinions and suggestions, and we anticipate hearing from you.

Thank you!
Newsletter committee
Sangeeta Parshionikar (Assistant Prof. Computer Department)
Heenakausar Pendhari (Assistant Prof. Computer Department)
Jainam Joshi (Student TE Comps B)
Dhruv Mayekar (Student SE Comps B)