Department of Computer Engineering
Academic Year 2022~2023
"Abhiyanta" Newsletter
For Odd Semester, Volume 1

About Department:

The Computer Engineering department was established in the year 2001 for providing excellent education to all students with an aim to foster creativity in Learning, research and building a knowledge base along with imparting quality education. The department possesses well qualified and motivated faculty members and support staff. The laboratories are adequately equipped with state~of~the~art facilities. The department offers add~on courses to cope with the latest trends in technology. It organizes industry visits and many series of expert lectures for the students on the latest developing trends in Computer Industry. Students of our department have won prizes in various national and international level paper presentation competition and project exhibitions. Every year a remarkable number of students place in companies such as Infosys, TCS, Accenture, Cognizant, L&T Infotech, CSC, Tech Mahindra, Mastek, TPG Axon, Artistivity etc.

Vision:

To be the finest centre of learning by imparting quality teaching in the field of computer engineering.

Mission:

- To inculcate in student the ability to analyse, design and develop software projects.
- To prepare students to be ready for ever changing scenario in the field of Computer Engineering.
- To help the students to attain and utilize their potential for successful carrier and to the need of society and industry.

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Program Educational Objectives (PEOs):

Students will possess:

PEO 1: Sound knowledge of mathematics, science and engineering fundamentals required for a lifelong career in computer engineering domains.

PEO 2: Skill to design and develop software projects for solving real world problems with the use of modern tools and techniques.

PEO 3: Professional ethics, leadership qualities and social awareness in the students.

Faculty Achievements

- **Dr. Sunita Patil:**

  - Conference Convener for 5th IEEE- International Conference on ADVANCES IN SCIENCE & TECHNOLOGY (ICAST-2022) which will be held on 2nd and 3rd December 2022

  - Co-Authored book chapter titled "Person-based Artificial Intelligence Chatbots -A driving force of Industry 4.0", Publisher - Elsevier, Book Title- Artificial Intelligence Techniques and Tools for Industry 4.0 Applications, Date of Publication –August 2022

  - Artificial Intelligence and Drone Technology Based A-Z (all round) solution for Coconut Farming, major research proposal submitted as Co-PI at Department of Biotechnology, Ministry of Science and Technology, Government of India New Delhi, India, dated 21st December 2022. Acknowledgement No: BT/PR/49108, Status –Awaited.

  - Convener, 5th IEEE International Conference on Advances in Science and Technology -2022 (ICAST-2022) Souvenir, published on 2nd -3rd December 2022.

  - Copyright: Type: Literary/ Dramatic Work, Title of Work: Deep Learning Based My Fashion Search Application, Registration No. L-120290/2022, Copyrights of Diary Number: 19054/2022-CO/L, Dated : 30/12/2022

  - Convener-KJSIT-The IET On Campus, Institute received "Thank You Support Institute award" by The Institution of The IET Mumbai Local Network , for the continuous active participation of the institute for the Year 2022.

  - Member, Board of Studies for Computer Engineering, UoM for the term Sept 2019 to Dec 2022.

  - University Staff Selection Committee (USSC) Member for University of Mumbai, 2022.

  - Judge, University of Mumbai Project Competition & Student Convention, "Avishkar- 2022, Categories-Engineering and technology, Humanities , Languages and Fine Arts and Pure Sciences Dec 2022

- **Dr. Sarita Ambadekar:** Completed the Innovation Ambassador "Foundation level" training program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

- **Dr. Shyamal Virnodkar:**

  - Completed the Innovation Ambassador "Advanced level" training program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

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- Conducted expert talk on Building Innovative solutions using Transfer Learning at Xavier's College of Engineering on 19 September 2022.

- Reviewer of SCIE/Scopus indexed journals: Remote Sensing, Photosynthesis, Sensors, Sustainability-15 Dec 2022

- Won Dr. S. K. Somaiya award for "Excellent in Research - Higher and Technical Education" on Somaiya Foundation day 1st Dec. 2022.

- Editor of "Ingénierie des Systèmes d'Information" SCIE journal July- Dec 2022.

- **Dr.Mandar Bivalkar:**

  - Presented two papers in International conference IGARSS 2022 Malaysia Kuala Lumpur during 17- 22 July 2022

- **Ms. Kavita Bathe:**

  - Completed the Innovation Ambassador "Advanced level" training program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

  - Conducted expert talk on Building Innovative solutions using on Transfer Learning at Xavier's College of Engineering on 19 September 2022

  - Conducted expert talk on Building Innovative solutions using on Ensemble Learning at Xavier's College of Engineering on 12 October 2022

  - Conducted expert talk on JAVA for EXTC students at K J Somaiya Institute of Engineering and Information Technology,Sion on 12 October 2022

  - Appointed as a reviewer for IEEE Xplore and scopus indexed ,5 Biennial International Conference on Nascent Technologies in Engineering Jan -2023 organized by Fr. C. Rodrigues Institute of Technology,Vashi

  - Appointed as a reviewer for IEEE Xplore and scopus indexed ,IEEE - International Conference on Advances in Science & Technology(IEEE-ICAST - 2022) Dec -2022 organized by K J Somaiya Institute of Engineering and Information Technology,Sion.

- **Ms. Mrunali Desai:** Completed the Innovation Ambassador "Foundation level and Advanced training" program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

- **Ms. Chitra Bhole:**

  - Completed the Innovation Ambassador "Foundation level and Advanced training" program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

  - Received 'Best Paper Award' for paper titled 'Confidante: Mental Health Chatbot' in 1st International Conference on AI and Big Data Analytics (ICAIBDA) held on 10th and 11th June 2022 conducted by G H Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra

  - Reviewed & published book of Software Engineering, Sem-V, Computer Engineering, Mumbai University

  - Reviewed and published book of Software Engineering, Sem-V, EC ECE branch, Mumbai University

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- Coordinator for Winter Internship Program at KJSIETE Dec-Jan 2022-23.

- Finalist for IET Volunteering Award- Nov 2022

- Reviewer at Journal of Network Security Computer Networks (e-ISSN: 2581-639X) ,14 Oct 2022.

- Reviewer for ANTIC-22 Springer Nature, Oct 2022.

- Reviewer of papers for IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI-2022), organized by IEEE MP Section and ABV-IIITM Gwalior, India on 21-23 December 2022.

- Appointed as a reviewer for IEEE Xplore and scopus indexed ,IEEE - International Conference on Advances in Science & Technology(IEEE-ICAST - 2022) organized by K J Somaiya Institute of Engineering and Information Technology,Sion.

- Won the Academic Champion of the year award by IET in Dec 2022.

- **Ms. Nisha Vanjari:**

  - Along with student team got the winning position in Smart India Hackathon 2022 organized by the Ministry of Education and AICTE during August 25-26, 2022.

- Completed the Innovation Ambassador "Foundation level and Advanced training" program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

- Appointed as a reviewer for IEEE Xplore and scopus indexed ,IEEE - International Conference on Advances in Science & Technology(IEEE-ICAST - 2022) organized by K J Somaiya Institute of Engineering and Information Technology,Sion

- **Ms. Aarti Sahitya:**

  - Completed the Innovation Ambassador "Advanced training" program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

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- IEEE Panel of Conference Organizer (POCO) workshop at IEEE Bombay Section at NMIMS, Vile Parle, Mumbai on 08 Dec 2022.

- Co-Ordinator for 5th IEEE ICAST international conference at KJSIEIT on 2nd and 3rd December 2022.

- **Ms. Pradnya Patil:**

  - Completed the Innovation Ambassador "Foundation level and Advanced training" program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

  - Co-Ordinator for 5th IEEE ICAST international conference at KJSIEIT on 2nd and 3rd December 2022.

  - Appointed as reviewer for IEEE Xplore and scopus indexed ,IEEE - International Conference on Advances in Science & Technology(IEEE-ICAST - 2022) organized by K J Somaiya Institute of Engineering and Information Technology,Sion

  - IEEE Panel of Conference Organizer (POCO) workshop at IEEE Bombay Section at NMIMS, Vile Parle, Mumbai on 08 Dec 2022.

- **Ms. Pallavi Patil:**

  - Completed the Innovation Ambassador "Advanced level" training program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

  - Co-coordinator for Winter Internship Program at KJSIETE Dec-Jan 2022-23.

- **Ms. Minal Sonkar:** Completed the Innovation Ambassador "Advanced level" training program (Total 15 Sessions of 30 contact hours) conducted by MoE's innovation cell and AICTE

- **Ms. Pradnya Bhangale:** Co-Ordinator for 5th IEEE ICAST international conference at KJSIEIT on 2nd and 3rd December 2022.

- **Ms. Payal Varangaonkar:** Co-coordinator for Winter Internship Program at KJSIEIT Dec-Jan 2022-23.

- **Ms.Shubhada Labde:**

  - Co-coordinator for Winter Internship Program at KJSIEIT Dec-Jan 2022-23.

  - Appointed as a reviewer for IEEE Xplore and scopus indexed ,IEEE - International Conference on Advances in Science & Technology(IEEE-ICAST - 2022) organized by K J Somaiya Institute of Engineering and Information Technology,Sion

- **Dr. Madhura Phadke:**

  - Appointed as a reviewer for IEEE Xplore and scopus indexed ,IEEE - International Conference on Advances in Science & Technology(IEEE-ICAST - 2022) organized by K J Somaiya Institute of Engineering and Information Technology,Sion.

  - Co-coordinator for ISTE, IET and University of Mumbai approved one week Faculty Development Program on Quantum Computing (12/12/2022 - 17-12-2022)

- **Dr. Shreya Patankar :** Co-coordinator for ISTE, IET and University of Mumbai approved one week Faculty Development Program on Quantum Computing (12/12/2022 - 17-12-2022)
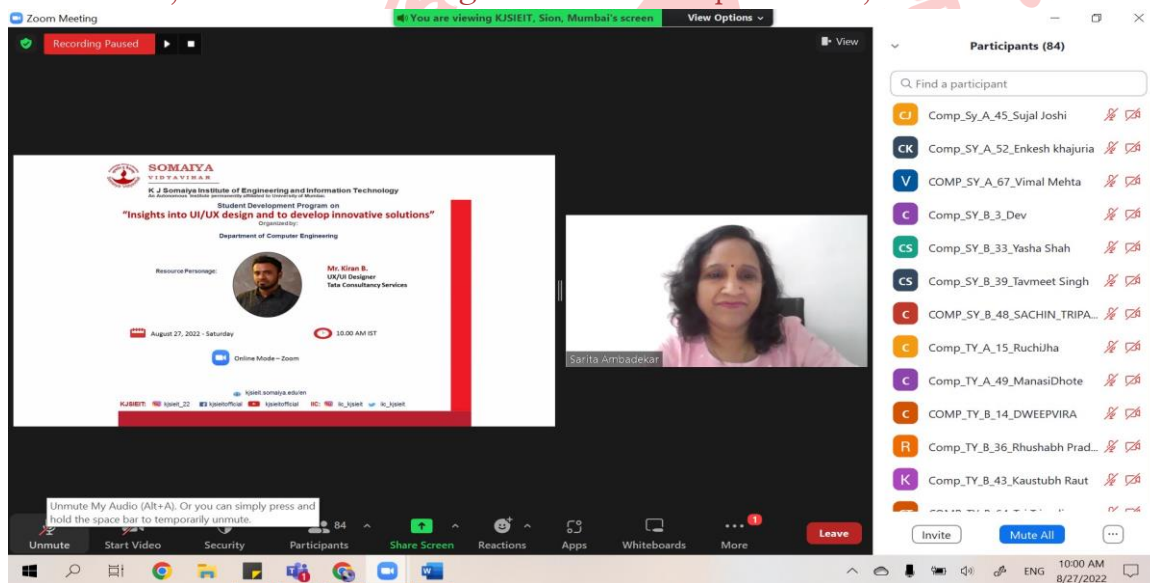
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● **Ms Jyoti Wadmare:** Reviewer for IEEE IEEE-International Conference on "Advances in Science & Technology (IEEE-ICAST - 2022)

Expert Talk Organised

● Dr. Sarita Ambadekar-Coordinator, Prof. Pradnya Patil & Prof. Jignasha Dala- Co-Coordinator has arranged a workshop on "Linux Administration" and speaker for session is Mr. Suhas patil , Solution Architect at Samsung dates on 07/05/2022.

● Dr. Sarita Ambadekar - Coordinator, Prof. Nisha Vanjari- Co-Coordinator has organized a seminar on :Research Awareness and speaker for this session is Dr. Shyamal Virnodkar, Assistant Professor, KJSIEIT dated on 18/07/2022.

● Dr. Sarita Ambadekar- Coordinator, Prof. Chitra Bhole and Prof. Aarti Sahitya - co-coordinator has organized a webinar on "IET awareness" and speaker for this session is Mr. Vimal Chaubhey, Cloud Architect, Capgemini dated on 23/08/2022.

● Dr. Sarita ambadekar- Coordinator, Prof. Pradnya Patil & Prof. Minal Sonkar has organized a Workshop On "Insights in to UI/UX design and to develop Innovative Solutions" and Speaker for this session Mr. Kiran B, UI/UX designer TCS pvt ltd, dated on 26/08/2022.

● Dr. Shyamal Virnodkar, Ms. Mrunali Desai, Ms. Kavita Bathe - coordinator, Dr. Sarita Ambadekar-Convener, had organized a workshop on Yoga pranayam by yoga trainer Ms. Kavita Pisolkar, dated on 10/09/2022.

● Ms. Jyoti Wadmare, Ms.Pradnya Patil- Coordinator, Dr. Sarita Ambadekar-Convener, had organized a expert talk on "Applying safety measures in day-to-day life by Mr. Kartik Kinge plant EHS officer, Tata Autocomp Systems Ltd dated on 10/09/2022.

● Ms. Nisha Vanjari,Ms. Shubhada Labde, Ms.Pradnya patil- coordinator, Dr. Sarita Ambadekar-Convener, had organized a expert talk on "Modern tools and techniques for ethical hacking by Mr. Vaibhav Lakhani, Senior Cyber security analyst network intelligence, dated on 17/09/2022.

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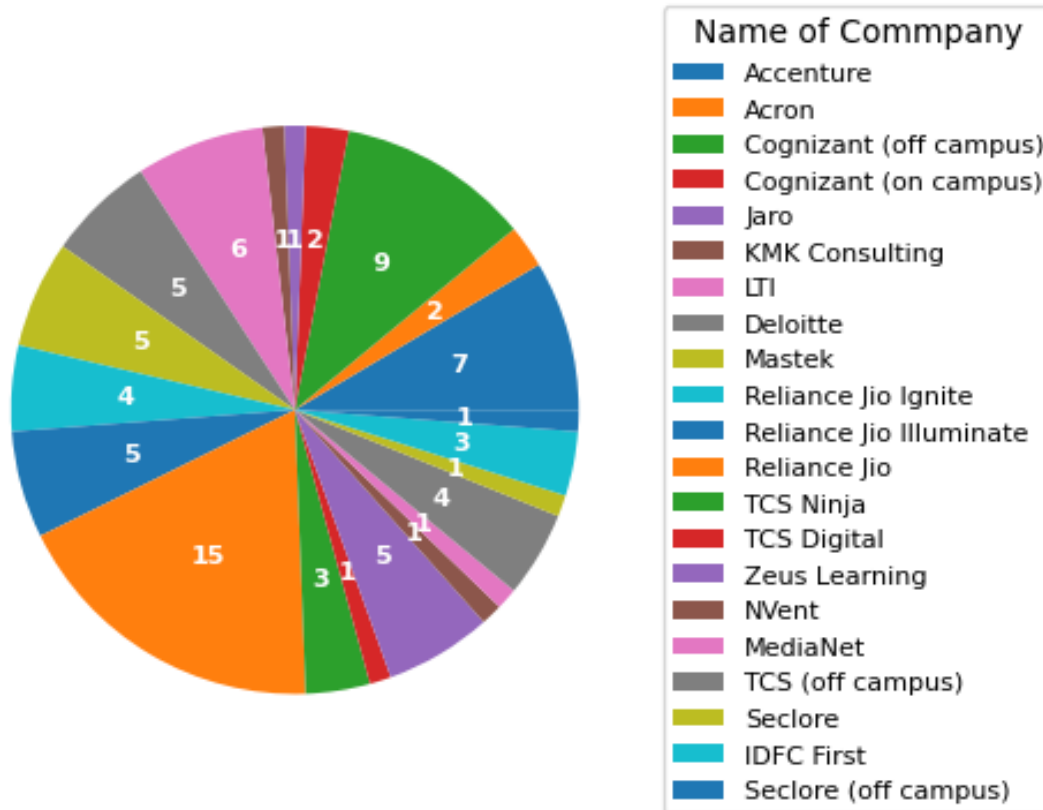**K. J. Somaiya Institute of Engineering and Information Technology**
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- Ms. Chitra Bhole, Ms. Aarti Sahitya- coordinator, Dr. Sarita Ambadekar-Convener had organized a hands on "Python" by Mr.Parag Nar, Software engineer, clover infotech dated on 24/09/2022.

- Ms. Nisha Vanjari,Ms. Shubhada Labde, Ms.Pradnya patil, Ms. Minal Sonkar- coordinator had organized a seminar on "Generative Adversial Networks and its application" by Mr. Tanay Joshi, Full stack developer Nexion spa, dated on 26/09/2022.

- Dr. Shreya Patankar, Ms. Pradnya Bhangale- Coordinator,Dr. Sarita Ambadekar-Convener had organized a awareness session on "project deep blue: mastek Initiative", by Mr.Swapnil Pawar, Software engineer mastek, dated on 05/10/2022.

- Ms. Minal Sonkar-coordinator, Dr. Sarita Ambadekar-Convener had organized a workshop on "Designing GUI based web application using AWT and Swing framework" by Ms. Nikita sheth, software development engineer, emtec inc,pune dated on 31/10/2022.

- Ms. Pallavi patil, Ms. Aarti Sahitya, Dr. Sarita Ambadekar-Convener had organized a workshop on "Innovative Designing of Dynamic web applications with PHP and Angular js" by Mr. Saurabh Vishakarma, Application Developer Harjai Computers Pvt.ltd, dated on 08/10/2022.

- Ms.Kavita Bathe,Ms.Pallavi patil, Ms. Aarti Sahitya, Dr. Sarita Ambadekar-Convener had organized a workshop on "Designing Innovative web applications using spring boot", by Mr.Amey Lande Senior Engineer, Nagarro, Pune, Maharashtra dated on 22/10/22.

- Ms. Jyoti Wadmare, Ms.Pradnya Patil- Coordinator, Dr. Sarita Ambadekar-Convener, had organized a workshop on :Game design and development using Unity", by Mr. Mohit Attarde, Game developer at Xplorro dated on 24/09/22.

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Placement Statistics

Students placed in various Companies

Student Achievements

● Abhishek Mehta, Amishkumar Parekh, Rohan Patel received 'Best Paper Award' for paper titled 'Confidante: Mental Health Chatbot' in 1st International Conference on AI and Big Data Analytics (ICAIBDA) held on 10th & 11th June 2022 organized by G. H. Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra

● Ronit Bhamere, Isha Patel, Jay Munjapara, Varad Sawant, Dhruv Parikh, Omkar Kareppa got the winning position in Smart India Hackathon 2022 organized by the Ministry of Education and AICTE during August 25-26, 2022.

● Aarush Dimri, Dhruv Krishnan ,Harsh Sawant, Yudhir Gala participation for Cybersecurity RnD Roadshow 2022 organized by DATA SECURITY COUNCIL OF INDIA (DSCI) at IIT Bombay on 21st and 22nd September 2022

● Divija Kinger, Taha Multani, Shivam Thakkar and Shubh Joshi won 1st prize at IIT Bombay TechFest MarshMcLennan APIGenerate-a-thon Competition on 15th December 2022.

● Dakshita Kolte won the student champion of the year award by IET (Dec 2022).

● Vidit Shah , Sheetal Popat, Pranjal Sancheti won Navriti 2022 Award (HEI level).

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Papers Published / PG Graduate Faculties

● Dr Sunita R. Patil and Dr Suresh K Ukarande, "Strategic Educational Research Action Plan (SERAP) for Developing Engineering Institutes in India: Building the foundation for Teaching Learning Processes" Journal of Science, Technology and Development, Volume XI, Issue X, ISSN:0950-0707, October 2022, Pg 157-178, http://journalstd.com/gallery/16-oct2022.pdf

● Dr Sunita R. Patil, Ms Smita Bhoir, "MY FASHION Search using Deep Convolutional Neural Network", Journal- Sadhana Journal, Springer publisher, Open access Indexing : Scopus indexed, Peer-reviewed. Status- Under review

● Dr Sunita R. Patil, Ms Smita Bhoir, "The FASHION Image Classification using Deep Learning Approach", Journal of Intercultural Communication, Indexing : Scopus-indexed, open access, peer-reviewed journal. Status- Accepted for publication (in press)

● Ms Reema Roy, Dr. Sunita R Patil, Automated Traffic Management Handling Traffic Congestions, 5th IEEE International Conference on Advances in Science and Technology (ICAST 2022), 2-3 December 2022, Host: K J Somaiya Institute of Engineering and Information Technology(KJSIEIT)), Mumbai Indexing: Scopus

● Darshan Patil, Reena Lokare, Dr. Sunita R. Patil, Privacy Preserving Document Classification using Convolution Neural Network- A Deep Learning Approach, 5th IEEE International Conference on Advances in Science and Technology (ICAST 2022), 2-3 December 2022, Host: K J Somaiya Institute of Engineering and Information Technology(KJSIEIT)), Mumbai Indexing: Scopus

● Dr. Sunita Patil and Ms. Smita Bhoir , Authored book chapter titled "Person-based Artificial Intelligence Chatbots -A driving force of Industry 4.0", Publisher – Elsevier Book Title- Artificial Intelligence Techniques and Tools for Industry 4.0 Applications, Date of Publication –September 2022. https://www.sciencedirect.com/science/article/pii/B9780323884686000036?via%3Dihub

● Dr. Sunita Patil and Dr Suresh Ukarande, Editors, KJSIEIT's 5th International Conference on Advances in Science and Technology -2022 (ICAST-2022) Souvenir, published on 2nd December 2022

● Dr. Sunita Patil and Ms Jyoti Wadmare, Chapter 04, "A Novel Approach for Weakly Supervised Object Detection Using Deep Learning Technique", Book Titled: Computational Intelligence in Image and Video Processing, Publisher, Taylor and Francis Gratis - eBook 9781003218111, December 2022.

● Ms. Mrunali Desai, Ritvij Vejare, Abhishek Vaish, Kapish Singh, Removal of Image Steganography using Generative Adversarial Network, Indian Journal of Artificial Intelligence and Neural Networking (IJAINN), Exploring Innovation | ISSN: 2582-7626 (Online) | A Periodical Journal | Reg. No: C/1383209 |Published by Lattice Science Publication, Volume-2 Issue-4, June 2022 | Retrieval Number: 100.1/ijainn.D1054062422 | DOI: 10.54105/ijainn.D1054.062422, NA, 30th June 2022, 10.54105/ijainn.D1054.062422

● Mr. Mandar Bivalkar, Dharmendra Singh, Application pf Entropy Based Adaptive Thrsholding and Phase Retrieval Technique for Target Detection and Identification in Ground Penetrating Radar, , 5th Prof. Vijaya Agarwala Memorial National Conference on Microwave Absorbing Materials (VAMMAM-2021), Microwave Absorbing Materials (VAMMAM0, MNNIT Allahabad, India, 23th - 24th August 2021

● Ms. Chitra Bhole, Abhishek Mehta, Amishkumar Parekh, Rohan Patel, Confidante: Mental Health Chatbot, , 1st International Conference on AI and Big Data Analytics (ICAIBDA), G H Raisoni Institute of

Engineering and Technology, Nagpur, Maharashtra Published in Conference Proceedings, 10th and 11th June 2022

● Ms. Nisha Vanjari, Ms.Shubhada Labde, Prediction of Skin Cancer Using CNN, IEEE Xplore, Electronic ISBN:978-1-6654-9499-1 CD:978-1-6654-9497-7 DVD ISBN:978-1-6654-9498-4 Print on Demand(PoD) ISBN:978-1-6654-9500-4, 3r d International Conference of Emerging Technology (INCET 2022), IEEE banglore Section, Jain College of Engineering, Belagavi, India; 27tb to 29th May 2022, 27tb to 29th May 2022 Published on 15th July 2022, https://ieeexplore.ieee.org/document/9825093

● Ms. Shubhada Labde, Statistical Analysis, ETL Automation and Intelligence Reporting, 2nd International Conference on IntelligentTechnologies (CONIT 2022), 24th to 26th June 2022

● Ms. Pradnya Patil, Sakshi Vora, Kartik Bhanushali, Rayees Shaikh, Stock Price Prediction using LSTM, Indian Journal of Artificial Intelligence and Neural Networking (IJAINN), Exploring Innovation | ISSN: 2582-7626 (Online) | A Periodical Journal | Reg. No: C/1383209 |Published by Lattice Science Publication, Volume-2 Issue-4, June 2022 | Retrieval Number: 100.1/ijainn.D1054062422 | DOI: 10.54105/ijainn.D1054.062422, , 30th June 2022, 10.54105/ijainn.D1052.062422

● Dr. Shyamal Virnodkar, Sunil Kumar Jha, Virupakshagouda C. Patil, Rekha B U, Sergey A. Bartalev, Dmitry Plotnikov, Evgeniya Elkina, Nilanchal Patel, "Sugarcane Yield Prediction Using Vegetation Indices in Northern Karnataka, India", Universal Journal of Agricultural Research, Vol. 10, No. 6, pp. 699 - 721, 2022. DOI: 10.13189/ujar.2022.100611., 1st Dec 2022

● Ms. Pradnya Patil, Kaustubh Kulkarni, Shweta Shirodkar, Rushikesh Khanjode, Sureka Kohle, Priyanka Deshmukh, Layer 2 Solutions to improve the scalability of Blockchain, 5th IEEE-International Conference on Advances in Science and Technology (5th IEEE-ICAST-2022)

● Ms. Pradnya Patil, Kaustubh Kulkarni, Kanad Gaikwad, Dr. Surekha Kohle, Implementation of Blockchain Technology in IoT based Smart Homes , 5th IEEE-International Conference on Advances in Science and Technology (5th IEEE-ICAST-2022)

● Sameer Pinjari,Nisha Vanjari, Ms. Pradnya Patil, Pallavi Patil, Shubhada Labde, Aarti Sahitya, Podcast Summarization System, 5th IEEE-International Conference on Advances in Science and Technology (5th IEEE-ICAST-2022)

● Mr. Prashant Nair, PG Students of 2018-19, Awarded with ME (Artificial Intelligence), PG degree at K J Somaiya Institute of Engineering and information Technology, September 2022.

● Mr. Darshan Patil, PG Students of 2018-19, Awarded with ME (Artificial Intelligence), PG degree at K J Somaiya Institute of Engineering and information Technology, October 2022.