CURRICULUM VITAE

Dr. Kaustubh Kumar Shukla, B.E., M.E., **M.Tech. (CSE)**, Ph.D., **PDF-CSE (Pursuing)**

Associate Professor**,** Department of Computer Science & Engineering (CSE), Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh-201306, India.
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Over **14⁺ years** of Teaching and Research Experience in reputed institutions across **Andhra Pradesh, Bihar, Tamil Nadu** and currently serving in **Uttar Pradesh.**

Career Objective

To impart high quality technical knowledge in the field of technical education and groom the young budding engineers excel in their field of specialization with discipline, commitment and to elevate the Institution to a higher level.

Academic Qualification

- **Post-Doctoral Fellowship (PDF)** in the **Department of Computer Science & Engineering (CSE)** at S R University, Warangal, Telangana, India. **(Pursuing)**
- **Ph.D.** in Electronics and Communication Engineering (ECE) was completed from Vinayaka Mission's Research Foundation (Deemed to be University), Salem, Tamil Nadu, India, in **February 2023**. https://shodhganga.inflibnet.ac.in/handle/10603/507294
- **M.Tech.** in **Computer Science Engineering** was completed from the Institute of Engineering and Technology, Kanpur, Uttar Pradesh, affiliated to Chhatrapati Shahu Ji Maharaj University, Kanpur, Uttar Pradesh, India, in June 2015, with **82.5 % (First Division).**
- **M.E.** in VLSI Design (Faculty of Information and Communication Engineering) was completed from Gnanamani College of Technology, Namakkal, Tamil Nadu, affiliated to Anna University, Chennai, Tamil Nadu, in June 2013, with **74.1% (First Class).**
- **B.E.** in Electronics and Communication Engineering (ECE) was completed from Vinayaka Mission's Kirupananda Variyar Engineering College, Salem, Tamil Nadu, affiliated to Vinayaka Missions University, Salem, Tamil Nadu, in May 2011, with **89 % marks**, securing a **Silver Medal and First Class with Distinction.**

Professional Experience: 14⁺ Years

- **Working** as an **Associate Professor** in the Department of **Computer Science & Engineering (CSE)** at Dronacharya Group of Institutions, Gr. Noida, Uttar Pradesh, from **27ᵗʰ February 2023 to till date.**
- Worked as a Guest Assistant Professor in the Department of ECE at Government Engineering College, Sheohar, Bihar from 13ᵗʰ September, 2021 to 7ᵗʰ January, 2023.
- Worked as an Assistant Professor in the Department of ECE at Sree Vidyanikethan Engineering College, Tirupati, Andhra Pradesh from 6ᵗʰ August, 2015 to 31ˢᵗ August, 2021.
- Worked as a Trainee Lecturer/Assistant Professor in the Department of ECE at Gnanamani College of Engineering, Namakkal, Tamil Nadu from May 2011 to July, 2015.

Academic Skills - Computer Science and Engineering (CSE)

- **Currently, working** in the department of **Computer Science and Engineering (CSE)** at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh, India.

- Competence to teach the **CSE based subjects** like Computer Organization and Architecture (**COA**), Computer Networks (**CN**), Digital Logic Design (**DLD**), Data Structures and Algorithms (**DSA**), Microprocessors & Microcontrollers (**MPMC**), Embedded Systems (**ES**), Image Processing (**IP**) etc.
- Completed multiple professional certifications in Computer Science & Engineering from premier institutions and platforms including **IITs, NITs, NITTTRs,** Coursera, edX, NPTEL (SWAYAM), Udemy, Great Learning, and Saylor Academy**,** covering domains such as AI, ML, IoT, Cybersecurity, Data Science, and Advanced Computing.
- **Knowledge Architect** at **Oakenhurst** for teaching UG and PG Students through Online Mode from 24th September 2025 to till date.
- **Event Coordinator** at **Smt. Geeta Maa Foundation (Education & Healthcare Trust)**, West Champaran, Bihar-845452. Organizing many events like seminars, workshops, FDPs, National and International Conferences in virtual modes. https://sites.google.com/view/geeta-maa-foundation/home
- Appointed as a council member of **ITA's accreditation team** in the field of information technology and computer science, with effect from January 14, 2026.
- **Providing the NIELIT DLC Course training and certifications** through the approved facilitation center "Smt. Geeta Maa Foundation (Education & Healthcare Trust)" via online mode.
- **Event Coordinator** at **Sidvi Foundation**, Visakhapatnam, Andhra Pradesh, India from 30th August 2025 to till date.

Academic Responsibilities

- **Governing Council Member** of **Incubation Centre** at Dronacharya Group of Institutions, Greater Noida. https://www.dgignincubatorcell.in/governing-council
- **CSE Department Coordinator of RDC** (Research and Development Cell) at Dronacharya Group of Institutions, Greater Noida, India.
- **Startup Activity Coordinator** & Member of Institution's Innovation Council **(IIC)** at Dronacharya Group of Institutions, Greater Noida, India. https://gnindia.dronacharya.info/Team-Members-IIC.aspx
- **Coordinator** of **e-Yantra/Robotics Lab** from April-2023 to till date at Dronacharya Group of Institutions, Greater Noida, U.P. https://gnindia.dronacharya.info/dgiroboticclub/members.aspx
- Having the **experience** of working in the different **criterions of NAAC** as well as **NBA** at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh, India.
- Worked as one of the Department level **Coordinator of IQAC**-Internal Quality Assurance Cell at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh, India.
- Worked as Institution level **Coordinator and Member** of **UiPath** Academic Alliance at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh, India.
- **Additional Departmental Responsibilities**-NAAC/NBA related Works, Students Attendance & Discipline Monitoring, Conduction of Co-Curricular Activities, Project & Internship works etc.

Academic Awards & Honors

- Receive the **Best Academician Award** in the field of Computer Science & Engineering from the Scientific Laurels Committee on 29th January, 2026. https://www.scientificlaurels.com/biography/0ev1yt
- Received the "**Letter of Appreciation** and **Rs. 10,000/-**" for the excellent result in the University Examinations in the subjects **"Digital Communication & Digital Signal Processing"** for B.Tech. Students on 15th November, 2025 at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh.

- Honored with the **Dr. A. P. J. Abdul Kalam Global Icon Award (2025)** by Welred Foundation for outstanding contributions as an **Excellent Researcher** and impactful academic service in the field of **Computer Science & Engineering** on 9th September 2025.
- Received the **Best Paper Award** for a paper entitled "Investigations and Analysis of Strategic Computing in Defense Based on Latest Technologies", in the International Conference on Core Engineering and Technology on 19th May 2025, organized by PERI Institute of Technology, Chennai.
- **Mentor of a team** for the project titled "Mind Cure AI: - Your Smart Assisting Solution" team has participated in the e-Yantra Innovation Challenge (eYIC 2024-25), **IIT, Bombay**.
- Felicitated as **"Guest of Honor"** during International Award Ceremony on the eve of UGADI-2025.
- Received **"Excellence in Innovative Teaching Practices Award"** on 26th and 27th January, 2025 by Sidvi Foundation, Visakhapatnam, Andhra Pradesh, India.
- "**Mentor in Smart India Hackathon-2024**" held at KIT College of Engineering, Kolhapur on 11th -12th December, 2024.
- Received the **Best Paper Award** for a paper entitled "Advanced uses of Micro Electro Mechanical Systems-Based Devices in Healthcare and Robotics Design" in 2nd IEEE International Conference on Innovations in High-Speed Communication and Signal Processing, organized by Maulana Azad National Institute of Technology, Bhopal on 6th-8th December, 2024.
- Received the **"Best Teacher Award"** in **"Guru Pratibha Puraskar-2024"** organized by Sidvi Foundation, Visakhapatnam, Andhra Pradesh, India on 1st September, 2024.
- Received the **"Research Excellence Award"** during ICMIRTM-2024 & **International Award Ceremony Ekta-2024**, organized by Sidvi Foundation, Visakhapatnam, Andhra Pradesh, India.
- Received the "**Appreciation Letter and Rs. 10,000/-**" for the excellent result in the University Examinations in the subject **"Fundamentals of Electronics Engineering"** for I B.Tech. Students on 1st August, 2024 at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh.
- Received the **Best Paper Award** for a paper entitled "Design and Analysis of a Novel Microbattery using Multiphysics based on Artificial Intelligence Applications" in 3rd IEEE International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN 2024) held at IFET College of Engineering on 18th and 19th July 2024.
- Received the "**Appreciation Letter and Rs. 10,000/-**" for the excellent result in the University Examinations for the subject **Sensor & Transducer –KEE052** on 22nd May, 2024 at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh.
- Received the "**Letter of Appreciation**" for the excellent performance and contributions in the field of research and development during the month March & April-2024, on 18th April, 2024 at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh.
- **Under my mentorship**, a student team received the **Best Pitcher Award** during the Boot camp at **NITTTR, Chandigarh** organized by AICTE and MIC from 22nd to 26th June, 2023.
- Received **"Best Paper Award"** on 20th June 2020, **(**ISBN: 978-93-87098-56-5) at Vasantrao Naik Art's, Commerce and Science College, Maharashtra, India.
- **Got Ratification** as Assistant Professor of ECE at Sree Vidyanikethan Engineering College, on 30th March 2016 from Jawaharlal Nehru Technological University, Anantapur, Andhra Pradesh.
- Declared as a **Silver Medalist (University 2nd Rank Holder)** for the U.G. (B.E.-ECE) Program, 2007-2011 Batch and received the Award on 7th July 2011 at Vinayaka Missions University, Salem.
- Received **2nd Best Paper Award** on 18th Sept.2010 at Muthayammal Engineering College, Namakkal.

- Received **1st Prize** at Paavai Engineering College, for "Tech. Marketing" on 20th -21st August, 2010.
- Received **1st Prize** at Paavai Engineering College, for "Poster Presentation" on 4th September, 2010.
- Received **1st Prize for Best Paper Presentation** on 9th Sept. 2010 at K.S.R. College of Technology.
- **Awarded** with **Grade-A** for the "Soft Skills Training" Conducted by **HP** at VMKVEC, Year-2010**.**

Served as a Resource Person & Other Contributions

- Acted as a **Guest Speaker** at the Tamil Nadu Dr. J. Jayalalithaa Fisheries University, Fisheries Business School, on the topic "Smart Aquaculture with MEMS and Blockchain for Predictive Analytics and Resource Optimization" on 8th September, 2025.
- Acted as a **Resource Person** and delivered a Webinar on the topic "Using Open-Source Tools & Techniques in Multidisciplinary Research" conducted on 8th March, 2025, organized by PBMEIT Expert Insights (www.pbme.in).
- Acted as **Keynote Speaker** on 1st March, 2025 in International Conference and Award Ceremony organized by Research Education Solutions in association with Institute of Management, Bhubaneswar, India.
- Acted as **"Special Invitee"** in International Conference on Science & Technology for Sustainable Development (ICSTSD-2025) on 27th & 28th February, 2025, organized by SSRD in collaboration with Shrimant Bhaiyyasaheb Rajemane Mahavidyalaya, Mhaswad, Satara, India.
- Acted as a **Keynote Speaker** on 26th and 27th January, 2025 in 3rd International Conference Advancing Knowledge from Multi-Disciplinary Perspectives in Agricultural, Life Science, Engineering & Technology -2025, organized by Sidvi Foundation, Visakhapatnam, Andhra Pradesh.
- Received the **Certificate of Appreciation** for 2025 IUPAC Global Women's Breakfast **Speaker.**
- Invited as a **Keynote Speaker & Chair Person** in International Conference on Multidisciplinary Approach of Sustainability & Green Innovation ICMASGI-2024 & Award Ceremony Pratibha-2024.
- **Coordinated as the Judge** for the event "Inni-Quest" at Dr. Abdul Kalam Inter-Technical University Literacy, Management and Technical Fest, 2024-25 (Zonal Level) held on 29th -30th November, 2024 at KCC Institute of Technology & Management, Greater Noida, Uttar Pradesh, India.
- Acted as a **Session Chair** at the 2nd International Conference on Optimization Techniques in Engineering & Technology, organized by Dronacharya Group of Institutions, Gr. Noida, Uttar Pradesh during 14th -15th June, 2024.
- Acted as a **Resource Person** for a workshop on "How to Plan for Start-Up and Legal and Ethical Steps" on 1st April, 2024 organized by R P Sarathy Institute of Technology, Salem, Tamil Nadu.
- Acted as a **Resource Person** for a workshop on "Intellectual Property Rights and IP Management for Start-up" on 8th March, 2024 organized by Gnanamani College of Technology, Namakkal, TN.
- Acted as a **Speaker** for a workshop on "Art and Skills of Writing Research Papers" on 6th March, 2024 at Dronacharya Group of Institutions, Greater Noida, Uttar Pradesh.
- Acted as a **Conference Chair** in Second International Conference on Recent Trends in Management, Engineering and Technology (ICMET)-2023, jointly organized by Vidya Vihar Institute of Technology, Purnia, Bihar and Global Conference Hub, Coimbatore, on 22nd & 23rd December, 2023.
- Acted as a **Conference Co-Chair** in 5th International Conference on Information Management & Machine Intelligence (ICIMMI-2023) on December 14th -16th, 2023 at Poornima Institute of Engineering & Technology, Jaipur, India.

- **Got invited** and served as a **Jury** for 10th National Level Exhibition and Project Competition (NLEPC) of INSPIRE Awards-MANAK which was held on 9th to 11th October, 2023 at, New Delhi.
- Acted as a **Guest Speaker** for a webinar on "Circuits and Device Modelling based on Sensor Technology" on 23rd September, 2023 organized by Annapoorna Engineering College, Salem, TN.
- Acted as a **Guest Speaker** for 15 days- Student Skill Development Program on "Sensor Design and It's Applications for Robotics" from 18th August, 2023 to 1st September, 2023 at Sree Vidyanikethan Engineering (Mohan Babu University), Tirupati, Andhra Pradesh.
- Acted as a **Guest Speaker** for a Seminar on "Project Design" on 22nd August, 2023 organized by Excel Engineering College, Komarapalayam, Tamil Nadu.
- Acted as a **Guest Speaker** for a webinar on "Emerging Trends and Applications of Microsystems" on 3rd March, 2023 organized by Annapoorna Engineering College, Salem, Tamil Nadu.
- Acted as a **Resource Person** for a guest lecture on "MEMS Technology for Modeling and Design of 3D Micro Structures in Multiphysics Environment" on 6th May, 2022 organized by Rajalakshmi Engineering College, Chennai, Tamil Nadu.
- Acted as a **Guest Speaker** for a webinar on "Role of Multidisciplinary Research and Education for Engineers" on 6th April, 2022 at Vivekanandha College of Technology for Women, Tamil Nadu.
- Acted as a **Resource Person** for "A 10-Day Exclusive Orientation Programme" from 9th October to 23rd October, 2022 at Erode Sengunthar Engineering College,Thudupathi, Erode,Tamil Nadu.
- Acted as a **Guest Speaker** for an online lecture (webinar), "The Role of Electrical and Electronics Design in Micro-Electro-Mechanical Systems" at Excel Engineering College on 23rd October, 2021.
- Acted as a **Resource Person** of the event "Refresher Programme for Electronics Engineering Faculties" at Vinayaka Mission's Kirupananda Variyar Engineering College on 23rd June, 2021.
- Acted as a **Resource Person** for a Webinar at Sri Ganesh College of Arts & Science, 22nd Jan, 2021.
- Acted as **Resource Person** for a webinar at Kongunadu College of Engg. & Tech., on 12th Sept, 2020.
- Acted as a **Resource Person** for a webinar at PERI Inst. of Technology, Chennai on 12th May, 2020.
- Acted as a **Resource Person** for a Seminar at Sri Ganesh College of Arts & Science, 27th Sept, 2019.
- Acted as **Resource Person** for a Seminar at V.M.K.V.Engineering College, Salem, on 31st July, 2019.
- Acted as a **Judge** for Poster Presentation during Mohan Mantra on 6th October, 2016 at Sree Vidyanikethan Engineering College, Tirupati, Andhra Pradesh.

Patents Granted/Published-08

1. **Granted** an Indian Design Patent entitled "AI Based Medical Imaging Device for Real-Time Diagnosis", Application Number: 479991-001, CBR Date: 12th Nov. 2025, Date of Issue: 14-01-2026.
2. **Granted** an Indian Design Patent entitled **"Mechanical failure Detecting Device"**, Application Number: 480564-001, CBR Date: 17th November 2025, Date of Issue: 14-01-2026.
3. **Granted** an Indian Design Patent entitled **"Machine Learning based Health Monitoring Device"**, Design Number: 478100-001, CBR Date: 27th October 2025, Date of Issue: 06-01-2026.
4. **Granted** a UK Design Patent entitled **"An Energy-Efficient Computer for Scheduling Sensor Networks"**, Design Number: 6492652, Grant date: 9th January 2026.
5. **Granted** a UK Design Patent entitled **"AI based Computing Device for Analysing Mathematical Equations"**, Design number: 6437809, Grant date: 22 April 2025.
6. **Granted** a UK Design Patent entitled **"Textile Machine for Quality Control in Automated Textile Dyeing Processes"**, Design number: 6429437, Grant date: 24th March, 2025.

7. **Granted** an Indian Design Patent entitled **"AI based Plant Virus Detecting Device"**, Design Number: 450619-001, on 6th March, 2025.
8. **Published** a Patent entitled **"Design and Implementation of a Micro Battery for Wearable and Implanted Medical Devices using MEMS Technology"**, Application Number: 202311087549, Date of Publication: 23rd February, 2024.

Patents Filed-03

1. Filed an Indian Design Patent entitled "AI-based Home Security Device", Application Number: 489216-001, CBR Date: 31st January, 2026.
2. Filed an Indian Design Patent entitled "Device for Training Machine Learning Model", Application Number: 485305-001, CBR Date: 27th December, 2025.
3. Filed an Indian Design Patent entitled "Blockchain Based Electronics Health Record Device", Application Number: 479992-001, CBR Date: 12th November, 2025.

Author/Editor of Books & Conference Proceedings-04

1. **Acted as one of the Editors** for the Book "Reasonable Exploration of the Diverse Principles of Science, Engineering & Technological Systems for Tomorrow", **ISBN: 978-81-988132-4-4**, published by GMF Publications (A Unit of Smt. Geeta Maa Foundation), July-2025.
2. **Acted as one of the Editors** for the "Proceedings of International Symposium on Multidisciplinary Innovate Research 2025", **ISBN: 978-81-985135-0-2**, published by Sidvi Publication House.
3. **Acted as one of the Editors** for the Book "Novel Innovations and Technologies in Computational Sciences and their futuristic Applications", **ISBN: 978-81-19757-24-4**, Bharti Publications.
4. **Acted as one of the Editors** for the Proceedings-ICMASGI-2024, held on 28th and 29th December, 2024. **ISBN: 978-81-971792-3-5**, Published-2024, Sidvi Publication House, Hyderabad.

Published Book Chapters & Conference Proceedings -11 (SCOPUS-08, Chapters with ISBN -03)

1. Sanghamitra V Arora, **Kaustubh Kumar Shukla**, "Optimizing Emergency Staffing Under Uncertainty: GAN-Driven Scheduling with Resilient Elephant Clan Optimization", 1st Edition, CRC Press, Page No.-17, Published on 8th October 2025, DOI: https://doi.org/10.1201/9781003570134 **(SCOPUS Indexed)**
2. Aditya Pal, Hari Mohan Rai, Abdul Razaque, **Kaustubh Kumar Shukla**, Sanjana Kumari, "Optimizing IoT Systems with Blockchain: A Comprehensive Framework for Security and Efficiency", in Lecture Notes in Networks and Systems, vol 1334. Springer, Singapore. https://doi.org/10.1007/978-981-96-4543-5_23 **(SCOPUS Indexed)**
3. Sandeep Mishra, **Kaustubh Kumar Shukla**, L. Imamdheen, "Analysis of Artificial Intelligence in Society, Environment and Education System", in A Research Based Peer Reviewed Book "Emerging Trends in Science & Technology", ISBN: 978-93-342-1980-7, Académique Publicación, March-2025.
4. Sandeep Mishra, A. G. Ganesh Kumar, **Kaustubh Kumar Shukla**, "A Strategic Analysis of Beowulf Clusters in Next-Gen Militry Applications" in the edited book on "Recent Development in India @2025" bearing ISBN: 978-93-49076-16-7" in February 2025.
5. **Kaustubh Kumar Shukla**, Dr. Saket Kumar & Dr. C Venkataramanan, "A New Era of Aviation: The Drone Revolution and Artificial Intelligence", in a book entitled "Novel Innovations and Technologies in Computational Sciences and their Futuristic Applications", ISBN: 978-81-19757-24-4, Bharti Publications Publication Year: 2024, Page No.-213-2024.
6. Hari Mohan Rai, Aditya Pal, **Kaustubh Kumar Shukla**, Alveera Hafeez, Abdul Razaque & Saule

Amanzholova, "Wireless Networks and the Internet of Things: Empowering Connectivity and Smart Applications", in Lecture Notes in Networks and Systems, vol 1128. Springer- Singapore, 5th December, 2024, https://doi.org/10.1007/978-981-97-7371-8_7 (SCOPUS Indexed)

7. **Kaustubh Kumar Shukla**, Hari Mohan Rai, Saule Amanzholova, Priyanka, Ashwani Chaudhary, Garima Sharma, "Exploring advancements, applications, and challenges in the realm of quantum cryptography", in the book entitled "Next Generation Mechanisms for Data Encryption", CRC Press (Taylor and Francis Group), eBook ISBN-9781003508632, 1st Edition, 2025. https://doi.org/10.1201/9781003508632 (SCOPUS Indexed)

8. Hari Mohan Rai, **Kaustubh Kumar Shukla**, Yashika Goya, Saule Amanzholova, Askarbekova Nessibely, "IoT-based real-time monitoring and control system for tomato cultivation", in Procedia Computer Science, Volume 241, 2024, Pages 433-438, 28th August, 2024. https://doi.org/10.1016/j.procs.2024.08.060 (SCOPUS Indexed)

9. **Kaustubh Kumar Shukla**, Hari Mohan Rai, Abdul Razaque, Saule Amanzholova and Bagdat Kozhakhmetova, "Enhancing Gain and Bandwidth of Microstrip Antennas through optimized 3D Printing: A study on Design and Implementation", in Proceedings of the 8th International Conference on Digital Technologies in Education, Science and Industry, Volume 3680, ISSN 1613-0073, December, 2023. https://ceur-ws.org/Vol-3680/S4Paper4.pdf (SCOPUS Indexed)

10. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, "A smart sensor using MEMS technology for artificial environmental monitoring," in Materials Today: Proceedings, vol. 66, Part-8, pp. 3626-3633, September-2022, doi: 10.1016/J.MATPR.2022.07.160. (SCOPUS Indexed) https://www.sciencedirect.com/science/article/abs/pii/S2214785322047824

11. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Effects of Thermally Induced Deformations and Surface Radiosity for 3D Heat Transfer and Its Applications" in the "Lecture Notes in Mechanical Engineering-Technology Innovation in Mechanical Engineering", Springer Publisher, Edition Number-01, Page-449-457, ISSN: 2195-4356, E-ISSN: 2195-4364, April-2022. https://link.springer.com/chapter/10.1007/978-981-16-7909-4_41 (SCOPUS Indexed)

Paper Publications in Journals -19 (SCIE-01, SCOPUS-07, Add. Web of Science-01, UGC-10)

1. Sandeep Mishra, Ravi Ranjan Kumar Dubey, Nand Raj, Hariom Kumar, Uday Kumar Rajak, **Kaustubh Kumar Shukla***, "Progressive Design and Assessment of MEMS-Based Devices for Healthcare and Computer Science Applications", Cuestiones De Fisioterapia, ISSN: 1135-8599, Vol. 54, No. 3, Page No. 5130-5148, February-2025. (SCOPUS Indexed) https://cuestionesdefisioterapia.com/index.php/es/article/view/1915

2. Sandeep Mishra, Ravi Ranjan Kumar Dubey, Sushree Mahapatra, Uday Kumar Rajak, M. Balakarthikeyan, **Kaustubh Kumar Shukla***, "Design and Implementation of Electronics based IoT-Enabled Smart Health Monitoring System", Volume XXVI, S2, 2025, ISSN: 2197-5248; Page-1607-1616, February-2025. (SCOPUS Indexed) https://www.seejph.com/index.php/seejph/article/view/5143

3. **Kaustubh Kumar Shukla**, M. Balakarthikeyan, G. Mahammedrafi et al."Inventiveness and Estimation of MEMS Constructed Appliance for Healthcare and Ecological Intensive Care", in Nanotechnology Perceptions, Vol.20, S15 (2024), Published on 1st December, 2024. DOI : https://doi.org/10.62441/nano-ntp.vi.3999 (SCOPUS Indexed)

4. Hari Mohan Rai, Aditya Pal, **Kaustubh Kumar Shukla**, Syed Atif Moqurrab, Saule Amanzholova, "Transformative Impacts of AI and the IoT on Healthcare Delivery: Methodologies, Ethical

Considerations, and Enhancement Avenues", in Engineering Review, Vol-44, No.-3, 2nd December, 2024, DOI: 10.30765/er.2523 **(SCOPUS Indexed)**

5. **Kaustubh Kumar Shukla**, Sonia Rani, Shilpy Gupta, C Venkataramanan, D Harika, A Nivetha & Teena Khorwal, "Exploring of Machine Learning for Sound and Signal Investigation", in Nanotechnology Perceptions, Vol.20, S14 (2024), Published on 4th November, 2024. https://nano-ntp.com/index.php/nano/article/view/3302 **(SCOPUS Indexed)**

6. Hari Mohan Rai, **Kaustubh Kumar Shukla**, Lilia Tightiz, Sanjeevikumar Padmanaban, "Enhancing data security and privacy in energy applications: Integrating IoT and blockchain technologies", in Heliyon,Volume-10,Issue-19,e38917,Oct.-2024.https://doi.org/10.1016/j.heliyon.2024.e38917 **(SCIE)**

7. Hari Mohan Rai, Atik-Ur-Rehman, Aditya Pal, Sandeep Mishra, **Kaustubh Kumar Shukla**, "Use of Internet of Things in the context of execution of smart city applications: a review", in Springer Journal-Discover Internet of Things, Open Access, Article Number-8, 31st August-2023. https://doi.org/10.1007/s43926-023-00037-2 **(SCOPUS Indexed)**

8. **Kaustubh Kumar Shukla**, T.Muthumanickam, T.Sheela,"Deployment of a MEMS-based System for Detecting Health-Related Environmental Variables and Measuring Intracranial Pressure," in Indian Journal of Natural Sciences, Vol.13, Issue 74, pp. 47541-47544, Oct. 2022. **(Add. Web of Science)**

9. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, "MEMS Technology for Early Stage Diesis Detection Using Micro-Cantilever Structure in Support of Biomedical Applications" in ECS Transactions, The Electrochemical Society Publisher, ISSN: 1938-5862, E-ISSN: 1938-6737, Volume-107, Number-1, Page-1125-1137, April -2022. **(SCOPUS Indexed)** https://iopscience.iop.org/article/10.1149/10701.1125ecst

10. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "3-D Complex Structural Modifications to Obtain Utmost Sensitivity Using MEMS Technology" in the Advanced Science Letters, ISSN No.-1936-6612, Volume-26, Issue- 06, Page-895-906, June, 2020. **(UGC)**

11. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Comparative Study of Sensitivity Improvement through Mechanical Properties of Micro-Cantilever", in the Journal of Information and Computational Science, ISSN-1548-7741, Vol.-9, Issue-11, Nov, 2019. **(UGC)**

12. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Study and Analysis of MEMS based Micro-Cantilever Sensor and its Medical Applications", in the Journal of Applied Science and Computation, ISSN-1076-5131, Vol.-06, Issue-2, Page-1812-1819, Feb, 2019. **(UGC)**

13. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Design of MEMS based Micro Cantilever" in the International Journal of Advanced in Management, Engineering and Technology,ISSN No.-2456-2998,Volume-04,Issue-01,Page-985-990,January, 2019. **(UGC)**

14. Amala Jyothi, **Kaustubh Kumar Shukla "**Symmetric Filter Design using Band-Pass Transformation Techniques" in the International Journal of VLSI System Design and Communication Systems, ISSN: 2322-0929, Vol.-05, Issue-09,-Sept, 2017. **(UGC)**

15. C Venkata Sudhakar, **Kaustubh Kumar Shukla**, G.Naresh, "Design and Development of a Signal Conditioning Board for Industrial Applications", in the International Journal of Trend in Research and Development,e-ISSN:2394-9333,Volume-4 ,Issue-1,Jan.-Feb, 2017. **(UGC)**

16. **Kaustubh Kumar Shukla**, G.Komala Yadav, "Design and Analysis of Semi-Transparent Flip-Flops for high Speed and Low Power Applications in Networks", in the IOSR Journal of Electrical & Electronics Engineering, ISSN: 2278-1676,(SMART-2016). **(UGC)**

17. **Kaustubh Kumar Shukla**, & Dr. Rashi Agarwal. (2015). AI-Enhanced MEMS Monitoring System for Health & Environment. In International Journal of Science, Engineering and Technology (Vol. 3, Number 1). https://doi.org/10.5281/zenodo.18068575 **(UGC)**

18. **Kaustubh Kumar Shukla**, Dr. Rashi Agarwal (2015). Smart MEMS Sensors with Artificial Intelligence for Continuous Healthcare and Environmental Quality Monitoring. International Journal of Computer Techniques, 12(6). ISSN: 2394-2231. https://ijctjournal.org/smart-mems-sensors-ai-healthcare/ **(UGC)**

19. Golla Nagarjuna, **Kaustubh Kumar Shukla**, Varalakshmi, "Concurrent Error Detection for BCH Encoders and Syndrome Computation", in the International Journal of Computer Trends and Technology, ISSN: 2231-2803, Vol. -17, Issue-1, Page-12-17, November, 2014. **(UGC)**

Conference Presentations & Publications-18+02=20 (SCOPUS Indexed-15, ISBN Proceedings-05)

International Conferences-18

1. **Kaustubh Kumar Shukla**, A. Kashyap, S. Mishra, R. Surendra Rao, M. Vimal Raja, and I. A. Pindoo, "*Computational Intelligence and Finite Element Modelling of Mechatronic Systems*," presented at the 2nd International Conference on Intelligent Systems for Communication, IoT and Security (ICISCIS 2026)**,** Coimbatore, India, Jan. 8–10, 2026. **(SCOPUS Indexed)**

2. A. Kumari, A. Srivastav, C. Dubey, **Kaustubh Kumar Shukla**, A. Chauhan, and A. Shrivastava, "*Investigations and Challenges of Generative AI for Agricultural Digital Twins*," presented at the 2nd International Conference on Intelligent Systems for Communication, IoT and Security, Jan. 8–10, 2026. **(SCOPUS Indexed)**

3. S. R., U. S. Kandhari, C. Padmavathy, B. Shoban Babu, P. Verma, and **Kaustubh Kumar Shukla**, "*AI-Enhanced MEMS-Based Weather and Environmental Condition Monitoring*," presented at the 2nd International Conference on Intelligent Systems for Communication, IoT and Security (ICISCIS 2026)**,** Coimbatore, India, Jan. 8–10, 2026. **(SCOPUS Indexed)**

4. Sandeep Mishra, Srilaxmi Dasari, **Kaustubh Kumar Shukla**, Harathi Nimmala, Balakarthikeyan M, Hari Keerthana "Sensitivity Analysis of Low-Cost Vibrating Band for Hearing Impaired using IoT", CISES-2025, on 11th-13th Aug. 2025. https://ieeexplore.ieee.org/document/11265549 **(SCOPUS Indexed)**

5. Sandeep Mishra, **Kaustubh Kumar Shukla**, Archana Kumari, "Investigations and Analysis of Strategic Computing in Defense Based on Latest Technologies", in the International Conference on Core Engineering and Technology on 19th May 2025, organized by PERI Institute of Technology, Chennai, Tamil Nadu. **(ISBN: 978-93-342-9649-5)**

6. **Kaustubh Kumar Shukla**, Mayank Jaiswal, Bani Sharma, Drishti Sharma, Abhinav Jain, Alaka Pradhan, "Implementation of IoT and AI based Device to Monitor Entry and Exit Points in Hospitals" in 5th International Conference on Data Intelligence and Cognitive Informatics (ICDICI-2024) held at SCADA College of Engineering & Technology, Tirunelveli, Tamil Nadu. **(SCOPUS Indexed)** https://doi.org/10.1109/ICDICI62993.2024.10810926

7. Sandeep Mishra, Bipin Pandey, Rajat Kumar, **Kaustubh Kumar Shukla**, "Artificial Intelligence and LiFi for Autonomous Vehicles and Future Transportation Systems" in 5th International Conference on Data Intelligence and Cognitive Informatics (ICDICI-2024) held at SCADA College of Engineering & Technology, Tirunelveli. https://doi.org/10.1109/ICDICI62993.2024.10810780 **(SCOPUS Indexed)**

8. Hari Mohan Rai, **Kaustubh Kumar Shukla**, Hasan Janashin, Mohd Ammar, Devina Gandhi, Vinayak Uniyal, "Advanced uses of Micro Electro Mechanical Systems-Based Devices in Healthcare and Robotics Design" in 2nd IEEE International Conference on Innovations in High-Speed

Communication and Signal Processing, organized by Maulana Azad National Institute of Technology, Bhopal on 6th -8th December, 2024. **DOI:** 10.1109/IHCSP63227.2024.10960079 **(SCOPUS Indexed)**

9. Sakshi Pandey, Sanghamitra V Arora, **Kaustubh Kumar Shukla** et al. "Optimizing 3D Printing to Increase the Gain and Bandwidth of Microstrip Antennas: A Research on Implementation and Design" in 3rd IEEE International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN 2024) held at IFET College of Engineering on 18th and 19th July 2024. DOI: 10.1109/ICSTSN61422.2024.10671029 **(SCOPUS Indexed)**

10. Sandeep Mishra, Mayank Jaiswal, **Kaustubh Kumar Shukla** et al. "Design and Analysis of a Novel Microbattery using Multiphysics based on Artificial Intelligence Applications" in 3rd IEEE International Conference on Smart Technologies and Systems for Next Generation Computing (ICSTSN 2024) held at IFET College of Engineering on 18th and 19th July 2024. DOI: 10.1109/ICSTSN61422.2024.10671311 **(SCOPUS Indexed)**

11. **Kaustubh Kumar Shukla**, Arpita Gupta, Sanghamitra V Arora, Hari Mohan Rai et al. "Environmental Monitoring and Protection using Artificial Intelligence" in 2nd International Conference on Optimization Techniques in Engineering & Technology, organized by Dronacharya Group of Institutions, Gr. Noida, Uttar Pradesh during 14th -15th June, 2024. **(SCOPUS Indexed)**

12. Harsh Kasaudhan, **Kaustubh Kumar Shukla**, Rishabh Kushwaha, Kanika Sharma, Utkarsh Gupta, Akshita Sharma, "Early Detection and Analysis of Lung Cancer Using Artificial Intelligence" in 5th IEEE International Conference on Computing, Power and Communication Technologies (IC2PCT-2024) organized by Galgotias University, Greater Noida on 9th & 10th February, 2024. **[IEEE ISBN:979-8-3503-8354-6]** https://ieeexplore.ieee.org/document/10486335 **(Scopus Indexed)**

13. Sandeep Mishra, Md Mustafa Kamal, **Kaustubh Kumar Shukla**, "An Overview of Artificial Intelligence for Cancer Prognosis and Treatment", in 5th IEEE International Conference on Computing, Power and Communication Technologies (IC2PCT-2024) organized by Galgotias University, Greater Noida, Uttar Pradesh, India on 9th & 10th February, 2024. **[IEEE ISBN:979-8-3503-8354-6]** https://ieeexplore.ieee.org/document/10486792 **(Scopus Indexed)**

14. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Investigation to Improve Reliableness for Health Monitoring in Different Environments using MEMS based Higher Sensitive Micro cantilever Array" in 2nd IEEE International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET 2022) at NIT, Patna on 24th-25th June, 2022 **[IEEE Xplore ISBN:978-1-6654-8875-4].** https://ieeexplore.ieee.org/document/9847970 **(Scopus Indexed)**

15. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, "Investigation through the Analysis of Double Strip Micro Cantilever for the Identification of Cancer at Early Stage" at the IEEE-6th International Conference on Intelligent Computing and Control Systems(ICICCS2022) organized by Vaigai College of Engineering, Madurai on 25th-27th May,2022 **[IEEE Xplore ISBN: 978-1-6654-1035-9].** https://ieeexplore.ieee.org/document/9788157 **(Scopus Indexed)**

16. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, "Micro Cantilever Arrays Optimization and Analysis for Healthcare Applications" at IEEE-International Conference on Applied Artificial Intelligence and Computing (ICAAIC-2022) organized by Narasu's Sarathy Institute of Technology, Salem on 9th-11th May,2022 **[IEEE Xplore ISBN: 978-1-6654-9710-7]. (Scopus Indexed)** https://ieeexplore.ieee.org/document/9792771

17. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Adoption of Semiconductor Materials in Support of MEMS Technology" on 20th June, 2020 at Vasantrao Naik Art's, Commerce and Science College **[ISBN: 978-93-87098-56-5]**.

18. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Micro and Nanosensors as a Better Monitoring System", 15th-16th June, 2020 at Sadguru Gadage Maharaj College and Shri Pancham Khemraj Mahavidyalaya, Maharashtra **[ISBN: 978-93-88901-14-7]**.

National Conferences-02

1. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, "MEMS based Sensor for Location Tracking and Monitoring Process" in the National Conference on 13th-14th August, 2021 at VEMU Institute of Technology, Chittoor, Andhra Pradesh **[ISBN: 978-93-90631-89-6].**

2. **Kaustubh Kumar Shukla**, Dr.T.Muthumanickam, T.Sheela, "Investigations & Characteristics of Heat Transfer in Different Microstructure Devices" on 26th-27thAugust, 2020 at NIT, Jamshedpur, Published on 6th February, 2021 by AIJR Publisher **[ISBN: 978-81-947843-2-6]**.

STCs/FDPs/Workshops/Seminars/Certificate Courses

- To enhance the knowledge & skills completed the following courses through **Udemy** till date.
  1. "Certified Master in Agentic AI: A 52-Week Applied Program", on 26th December 2025.
  2. "AI/ML Foundations for Absolute Beginners (Agentic AI + ML Ops)", on 15th July, 2025.
  3. "Arduino Based Fire Alarm System", on 21st September, 2024.
  4. "Hands-on Robotics with Arduino, Build 13 Robot Projects" on 20th August, 2024.
- Attended IEEE Region 10 Conference Quality Workshop (2025), organized by **NITTTR Chandigarh** on 7th November 2025.
- Attended **ESTIC-2025**, held at Bharat Mandapam, New Delhi, from 3rd to 5th November 2025, under the esteemed aegis of the **Department of Science & Technology, Government of India.**
- Completed a Professional Development Programme (PDP) on "Developing a Curriculum Framework Aligned with NEP 2020, OBE, and AI Advancements", from **National Institute of Technical Teachers Training and Research (NITTTR), Chennai**, from 4th to 8th August 2025.
- Successfully completed a 5-day FDP focused on "Artificial Intelligence, Machine Learning, and Deep Learning applications in Autonomous Vehicle systems", from 28th July to 1st August 2025, organized by **National Institute of Technology, Karnataka**, in association with Pantech eLearning.
- Completed a workshop on "Internet of Things" on 25th July 2025, conducted by Indian Info Tech.,TN.
- Completed a course on "Computer Architecture" on 3rd July 2025, conducted by Saylor Academy.
- Completed one week Faculty Development Program on "AI & Cloud Security: Compliance Strategies for a Digital Future", Technically Sponsored by IEEE Bombay Section organized by Yeshwantrao Chavan College of Engineering, Nagpur during 7th to 12th April 2025.
- Completed One week FDP on "Harnessing Virtual Labs for Effective Student Engagement" on 17th-21st March, 2025, organized by Lendi Institute of Engineering & Technology, Vizianagaram,A.P.
- Completed an Online Workshop on "AI-Powered Cyber Security: The future of Digital Defence" organized on 8th March, 2025 by ECLearnix EdTech Private Limited, Coimbatore, Tamil Nadu, India.
- Completed an Online Workshop on "Artificial Intelligence & Machine Learning" organized on 1st March, 2025 by ECLearnix EdTech Private Limited, Coimbatore, Tamil Nadu, India.
- Completed one-week national level faculty development program on "AI Tools" organized by Sathyabama Institute of Science and Technology in association with Brainovision Solutions India Pvt. Ltd.in collaboration with AICTE during 17th -21st February, 2025.
- Participated in an online workshop entitled "Unlocking Research Funding: A Guide to Planning and Writing Research Proposals" on 8th February, 2025, organized by Poornima University.

- Participated in an online workshop entitled "Patent Application Process: Pre-filing to Grant" on 30th January, 2025, organized by Poornima University.
- Completed a faculty development program on "Machine Learning for Cyber Security" conducted by Electronics & ICT Academy, C-DAC Hyderabad during 3rd -7th February, 2025.
- Participated in One Week Online Faculty Development Program (FDP) on "Significance of Emerging Technologies & Intellectual Property Rights (IPR)" organized by Mangalmay Institute of Management & Technology, Gr. Noida from 16th-20th December, 2024.
- Participated in the INUP - i2i, "17th User Awareness Workshop on Device Fabrication & Characterization Facility for Nanotechnology", held at **IIT Delhi** during 13th –14th November, 2024.
- Participated in national level five-day faculty development program on "SEPT@360-Skill Enhancement Program for Teachers" held on 2nd-6th September, 2024, organized by Stella Matutina College of Education and Sri Vidhya College of Arts and Science, Virudhunagar, Tamil Nadu.
- Participated in "National Drone Symposium 2024" held on 6th September, 2024 at Ajay Kumar Garg Engineering College, Ghaziabad, Uttar Pradesh.
- Completed AICTE recognized Faculty Development Program on "Open CV for Image and Video Processing Applications" from 22nd -26th July, 2024 at Dronacharya Group of Institutions, Greater Noida, Conducted by CSE Department OF DGI under **NITTTR, Chandigarh.**
- Completed Faculty Development Program on "Recent Trends in Artificial Intelligence" from 20th May, 2024 to 24th May, 2024 at PSN College of Engineering and Technology, Tamil Nadu, India.
- Participated in the skill training workshop on the title "Efficient Project Management & Documentation: Modern Tools usage for Project & Paper writing" organized by St. Xavier's College of Management & Technology, Patna on 16th April, 2024.
- Participated in a Workshop on "Virtual Labs", conducted by **IIT, Delhi** and it was held at Dronacharya Group of Institutions, G. Noida on 8th December, 2023.
- Attended Three Days Workshop on "Self-Balancing Robot Design" at **IIT Bombay, Mumbai** e-Yantra Lab Setup Initiative (eLSI) from 3rd - 5th August, 2023.
- Completed a workshop on "VLSI to System Design: Silicon to End Application Approach" organized by AICTE, Arm Education and STMicroelectronics from 31st July to 4th August, 2023.
- Successfully completed a MOOC course on 20th July, 2023, entitled "eLSI: Basics of Embedded Systems and Robotics" organized by **IIT Bombay, Mumbai.**
- Participated in Innovation, Design and Entrepreneurship (IDE) Bootcamp from 22nd June to 26th June 2023 at **NITTTR, Chandigarh** organized by MIC and AICTE.
- Successfully completed the 3-day Face-to-Face FDP on "Inculcating Universal Human Values in Technical Education" organized by AICTE at DGI, from 2nd - 4th June, 2023.
- Participated as a Faculty Coordinator for the eLSI lab of Dronacharya Group of Institutions, Greater Noida in the event "e-Yantra Symposium-2023" at **IIT Bombay, Mumbai** on 5th and 6th April, 2023.
- Successfully Completed one-week STC on "Antenna Design and Fabrication using Additive Manufacturing Techniques" from 20th March, 2023 to 24th March, 2023 at **NITTTR, Chandigarh.**
- Completed successfully ATAL Academy Online Elementary FDP on "Trends in MEMS & Nanotechnology" from 7th-11th Dec, 2021 at Alvas Institute of Engineering & Technology.
- Successfully completed the PMRF Course Micro-Nano Fabrication and Characterization on 10th Nov, 2021, organized by ISSS (Institute of Smart Structures and Systems)-**Indian Institute of Science.**
- Completed **5 Days ATAL FDP** on "AICTE Training and Learning Sponsored Virtual Faculty

- Development Program on Sensor Technology" on 4th- 8th Oct, 2021 at K S R College of Engineering.
- Completed an online course, "Smart Materials: Microscale and Microscale Approaches", authorized by Peter the Great St. Petersburg Polytechnic University, offered through Coursera on 7th April, 2021.
- Participated in the two-day virtual International Workshop on Advanced Materials and Applications (IWAMA) organized by **NIT, Tiruchirappalli**, Tamil Nadu, India on 1st-2nd March, 2021.
- Attended the AICTE sponsored FDP-STTP on Science and Technology of Advanced Material (STAM-2021) held at **NIT, Arunachal Pradesh** on 22nd-26th February, 2021.
- Participated in APSSDC (**Andhra Pradesh State Skill Development Corporation**) FDP on "Embedded Systems (2020-21)" from 15th-27th February, 2021.
- Completed AICTE Training and Learning (ATAL) Academy Online FDP on "Control Systems & Sensors Technology" from 1st -5th February, 2021 at **National Institute of Technology, Calicut.**
- Completed **5 Days ATAL Academy FDP** on "Novel Materials", 4th-8th January, 2021 organized by Malaviya **National Institute of Technology, Jaipur.**
- Completed **5 Days ATAL FDP** on "Wearable Devices", 14th-18th Dec, 2020, **NIT, Jamshedpur.**
- Completed **5 Days ATAL FDP** on "Sensors Technology", 7th-11th Dec, 2020, organized by Thiagarajar Polytechnic College, Salem, Tamil Nadu.
- Completed **5 Days ATAL FDP** on MEMS, 23rd-27th Nov, 2020, Sardar Patel College of Engineering.
- Completed Two-Week FDP on "Multidisciplinary Research Innovation in Engg, Science & Tech. for Sustainable Development", Bipin Tripathi Kumaon Inst. of Tech. 26th Oct-7th Nov, 2020.
- Completed 6 Days STTP on "Recent Advances in MEMS, Mechatronics and their applications for future challenges" during 21st-26th Sept, 2020, organized by Mahatma Gandhi Institute of Technology.
- Completed **1-Month Internship** "Macroelectronics", 5th August -5th September, 2020, R V College of Engineering, Bangalore.
- Completed 5 Days STTP "Sub-μm device & Modeling Tech.", 20th-24th August, 2020, organized by Dr. B R Ambedkar **NIT, Jalandhar**, Punjab.
- Completed 6 Weeks courses on three different modules Microfluidics, BioMEMS, MEMS, 22nd June-31st July, 2020, Saveetha Engineering College, Chennai, Tamil Nadu.
- Completed "Materials Science" online Course through Coursera (Univ. of California),14th May, 2020.
- Completed "Pressure, Force, Motion, and Humidity Sensors" Course from Coursera, 21st April, 2020.
- Completed 6 Days STTP on "Recent Trends and Research Challenges on Nano CMOS VLSI by Industry Standard EDA Tools", 26th-31st August, 2019 at Sree Vidyanikethan Engineering College.
- Completed **NPTEL-8 weeks FDP** (Feb.-April, 2019) on "BioMEMS and Microsystems".
- Completed 5 Days FDP "MEMS Design and its Applications",24th-28th Oct, 2016,SVEC,Tirupati,A.P.
- Completed 6 Days Workshop on "Emerging Trends in VLSI & Signal Processing",22nd -27th Aug, 2016 at Sree Vidyanikethan Engineering College, Tirupati.
- Completed Two-Week Workshop "Signals and Systems" conducted by **IIT-Kharagpur** from 2nd - 12th January, 2014 at Gnanamani College of Engineering, Namakkal, Tamil Nadu.

Events Conducted/Coordinator of the Events

- Acted as "**Event Coordinator**" and Conducted **"Robo Race"** from **past three years** during **Dron-Pratibimb-2023, 2024 and 2025** at Dronacharya Group of Institutions, Greater Noida.
- Conducted a **Quiz** on the occasion of National Entrepreneurship Day on "Entrepreneurship and Business Development", at Dronacharya Group of Institutions, Greater Noida on 9th November, 2023**.**

- Conducted a workshop on "Recent Trends in Robotics" on 11th-13th May, 2023 at DGI, Gr. Noida.
- As an **Event coordinator** of Sidvi Foundation as well as Smt. Geeta Maa Foundation (Education & Healthcare Trust), conducted several events.

Project/Research Dissertation Titles

- **Ph. D.** : Design and Performance Analysis of MEMS-Based Device for Environmental Monitoring and Healthcare. **(Year: 2023)**
- **M.Tech.** : AI-Enhanced MEMS Monitoring System for Healthcare & Environmental based Applications. **(Year: 2015)**
- **M. E.** : Design of Novel Semi-Transparent Flip-Flops (STFF) for High Speed and Low Power Applications. **(Year:2013)**
- **B. E.** : Supervisory Control and Data Acquisition (SCADA) Software Technology for Power Plant and Industries. **(Year:2011)**

Involvement in Research Projects

- Received DST–IEDC funded projects (₹1,00,000 total) under the mentorship of Dr. T. Muthumanickam**,** focusing on Green Power Campus Environmental System (2009–2010).
- Received DST–IEDC funded projects (₹1,00,000 total) under the mentorship of Dr. T. Muthumanickam**,** focusing on Intelligent Irrigation Control and Monitoring Using Internet (2008–2009).

Involvement in Editorial Board of Journals/Conferences

- **Reviewer**, American Journal of Bioscience and Bioengineering (BIO) – Reviewed and evaluated research manuscripts for quality, originality, and relevance.
- **Editor**, European Journal of Engineering and Technology Insights (EJETI) – Handled manuscript editing, peer-review coordination, and publication decisions.
- **Reviewer**, Journal of Applied Science and Engineering, Tamkang University, Taiwan – Assessed technical research papers and provided expert review feedback.
- **Editorial Board Member**, International Journal of Convergent Research (IJCR) – Contributed to editorial policy, peer-review oversight, and journal development activities.
- **Reviewer**, STM Journals – Reviewed multidisciplinary engineering and science research articles.
- **Reviewer**, BMC Bioinformatics, Springer Nature – Performed peer review of bioinformatics research for an international, high-impact journal.

Served as a Reviewer for National/International Conferences and Journals

- Reviewer - IEEE DELCON 2025**,** Jamia Millia Islamia, New Delhi, India.
- Reviewer - CISTM 2025, Akal University, Bathinda, Punjab.
- Reviewer - IETACS 2025**,** Chandigarh Engineering College (CEC), Mohali, Punjab.
- Received the **"Certificate of Excellence in Peer-Reviewing"** on 5th Feb. 2025 by B P International.
- Reviewer - FTNCT-06, Graphic Era Hill University, Haldwani Campus, India.
- Reviewed a manuscript "System level simulation & fabrication of SOI-MEMS differential Capacitive accelerometer" for Journal of Applied Science & Engineering, **Tamkang University, Taiwan.**

Research Interests

- Artificial Intelligence & IoT
- MEMS (Micro-Electro-Mechanical Systems)
- Embedded Systems & Robotics
- VLSI Design & Sensor Technology

Knowledge of Tools

- Google Colab & RStudio
- COMSOL Multiphysics
- LTspice (Analog Electronic Circuit Simulator)
- Solve Electric Circuit (Circuit design)
- Draw.io tool
- Tinkercad-3D (CAD design tool)
- Atmel Studio, Arduino
- Origin Analysis tool
- Matlab
- eSim EDA tool for circuit design

Subjects Taught/Teaching

- Computer Organization and Architecture
- Computer Networks
- Software Engineering
- Digital Signal Processing
- Antenna and Wave Propagation
- Digital Communication
- Digital Logic Design
- Data Structures and Algorithms
- Web Technology
- Basic Electronics Engineering
- Micro & Smart Systems
- Transmission Lines & Waveguides

Acted as a Project Supervisor for UG & PG Students

- B.E./B.Tech.   :   50 (CSE/ECE Students)
- M.E./M.Tech.   :   15 (CSE/ECE Students)
- Ph.D.   :   Applied for Guideship **(Awaiting)**

Memberships

- **IEEE** Membership, Membership No.-95123577, Membership is valid till 31st December 2026.
- Lifetime Membership of **ISTE**, Membership No.-LM 91760.
- Member of **INDIACom**, Member ID: 61783 from December 2025 to till date.
- Lifetime Membership of **IAENG** (International Association of Engineers), Membership No.-271452.
- Member of International Teachers Association (ITA) as an **ITA Project Manager**, Membership No.-750.
- Lifetime Membership of SSRD, Membership No.- LM 24132, Date of issue: 6th December, 2024.
- Lifetime Membership of "Art of Giving Movement" AOGM Number: aog-24-0-00779243.
- Member of International Statistical Engineering Association, Membership ID: 95324292.

Declaration

I hereby declare that the information furnished above is true to the best of my knowledge and belief. I am solely responsible for its accuracy.

Yours Sincerely,

(Dr. Kaustubh Kumar Shukla)

Place: Greater Noida, Uttar Pradesh.
Date: 28th February, 2026