

Faculty Profile



Dr. J. Anish Kumar , M.E., Ph.D

Associate Professor - EEE

HIGHLIGHTS:

- Number of Journal Publications:28
- H-Index:6
- Patents Published:16
- Patents Granted:1

PROFESSIONAL LINKS:

- Scopus ID: 57443995500
Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57443995500>
- Google Scholar ID: [9rg1gWoAAAAJ](#)
- Anna University Faculty ID: 2122001
- AICTE Faculty ID: 1-472607878
- Anna University Supervisor ID: 4290023
- LinkedIn: <https://www.linkedin.com/in/anish-kumar-62b157150/>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 20 Years
- Industrial Experience: Nil

AREA OF SPECIALIZATION:

- Internet of Things
- Embedded System Design
- Power Electronics
- Digital Electronics

Ph.Ds GUIDING:

- Full Time Scholars: 1
- Part Time Scholars : 5

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

ATAL FDP Proposals Selected for Support with Grant in Aid 2024-25 (ATAL BASIC FDPs:

UG/PG/Research Institute Category)

Title: Integrating Machine Learning and Deep Learning in Real-time IoT Systems (in Association with NVIDIA)

Application No: 1717146890

Co-coordinator: Dr.J. Anish Kumar

Grant amount: 3.5 Lakhs

PATENTS PUBLISHED/GRANTED:

S.No	Application No	Title	Filing Date	Publication Date	Remarks
1.	202041043513 A	Traffic Light Control System Using Solar Power	06-10-20	16-10-20	Published
2.	202041043513 A	IoT based Sailing Vessel Stem Bulb Mounted Sail Course Recorder	27-1-23	10-2-23	Published
3.	378147-001	Sun Tracking Solar Panel	28-1-23	12-4-23	Granted
4.	202341061257	An IoT based predictive material damage prevention for enhanced equipment reliability	12/09/23	02-02-24	Published
5.	202341061250	Ai &IoT-based water purification system monitoring for real time contaminant detection	12/09/23	02-02-24	Published
6.	202341061256	An IoT based real-time water quality monitoring & algal bloom prediction in aquaculture	12/09/23	02-02-24	Published
7.	202341061248	Ai-driven smart water purification system using multiple sensors for intrusion detection in water	12/09/23	02-02-24	Published
8.	202341061249	Ai and IoT based optimized solar-driven water purification for tribal people	12/09/23	02-02-24	Published
9.	202341058482	Creating an automated pest detection and control system using machine learning and robotics	31/08/23	02-02-24	Published
10	202341058461	Designing a smart livestock	31/08/23	02-02-24	Published

		monitoring system using wireless sensor networks and data analytics			
11	202441039880	Prediction of Stator Slot Size variation in Industrial Drives using Wavelet Transform and Machine Learning	22/5/24	31-05-24	Published
12	202441063052	Prediction of Stator Faults in Industrial Drives using Morlet Wavelet Transform	21-08-24	30-08-24	Published
13	202441068687	Thermal Image Based Prediction of Rotor Faults in Industrial Drives using Gabor Wavelet Transform and LOA-LSTM	11-09-24	04-10-24	Published
14	202441079239	Cardless ATM with Dual Layer Biometric Security	18-10-24	25-10-24	Published
15	202441097003 A	Intelligent Weather Prediction System Using IoT and Machine Learning	09/12/2024	13-12-24	Published
16	434855-001	Driver Module for Electric Bicycle	10-11-25		Design grant In progress

COURSES CERTIFIED:

- Leadership, Aug to Sep 2018, 4 weeks course, NPTEL
- Introduction to Internet of Things, July to Oct 2019, 12 weeks course, NPTEL
- Online course Recognized by Skill Council for Green Jobs conducted from 1st May 2019 to 31 Dec 2019 Student solar Ambassador Workshop 2019, IIT Bombayx
- Machine Learning completed on 27.04.2020, Capability Development, Tata Steel
- Learn Linux in 5 Days and Level Up your Career, April 2020, Udemy Online courses
- Introduction to Raspberry Pi 4, May 2020, Udemy Online courses
- “IPR and IP Management for Innovation and Start-ups”, April 15th 2020, Webinar, R.M.K Engineering College.
- “IoT Applications and its Trends”, April 16th 2020, webinar, SNS college of Engineering
- Python for Beginners: Learn Python Programming (Python 3), May 2020, Udemy Online courses
- Master Microcontroller- Timer, PWM, CAN, RTC, Low Power (MCU2) on May 2021, Udemy Online courses
- Complete C programming course - C language for students, Oct 2021, Udemy Online courses
- Python for machine learning ,7-1-2022, Cloud X Lab online course
- Indo Universal Collaboration for Engineer Education (IUC EE) International Engineering Educator Certification Program(IIEECP), July 2023.
- Introduction to Machine Learning, July to Sep 2024, 8 weeks course, NPTEL
- Data Science for Engineers, July to Sep 2024, 8 weeks course, NPTEL

- Introduction to Industry 4.0 and Industrial Internet of Things, July to Sep 2024, 8 weeks course, NPTEL

ACHIEVEMENTS AND AWARDS:

- **Best Teacher Award for the Academic Year 2009 -2010**
- 100 % result in Embedded Networking Subject
- 100 % result in Advance Microprocessor and Microcontroller Subject
- 100 % result in Microcontroller Based System Design Subject
- 100 % result in RISC Processor Programming and Architecture Subject
- 100% result in Computer in Networking and Digital Control
- 100% result in Power Electronics Subject
- Entrepreneurship Week –India 2014 Premier Awards
- Guinness World Record of Most people to complete CPR Training in 24 Hours awarded to Saveetha University on April 2016

SPECIAL SESSIONS DELIVERED:

- One Day workshop on PIC18F4520 Microcontroller by Mr. J.Anish Kumar on 10/9/2013, at Saveetha Engineering College
- One Day workshop on PIC18F4520 Microcontroller by Mr. J.Anish Kumar on 17/9/2013, at Saveetha Engineering College
- FDP on Project Building Using ARM Cortex Processor" by Mr.J.Anish Kumar from 28/7/2014 to 30/7/2014 at Saveetha Engineering College
- Three Day Workshop on Project Building Using ARM Cortex Processor" by Mr.J.Anish Kumar, from 14/9/2015 to 16/9/2015 at Saveetha Engineering College
- “One day workshop on MSP430 Microcontroller for Power Electronics Applications” by Mr.J.Anish Kumar, on 19/2/2016 at VIT University, Chennai.
- One day Workshop on Labview and its Application, by Mr.J.Anish Kumar on 18/02/2017 at Saveetha Engineering College.
- Hands on Training in FDTP on Embedded Systems -E6602, 5/12/2017 & 7/12/2017 organized by Department of Electronics and Instrumentation Engineering at Saveetha Engineering College
- One Day Workshop on Project Building Using ARM CORTEX Processor" by Mr.J.Anish Kumar, on 21/9/2018 at Saveetha Engineering College.
- SSA101x: Hands-on training on Solar Study Lamp Assembly (IIT BombayX) on 2/10/2019 By Mr.J.Anish Kumar at Saveetha Engineering College.
- IEI-KLC Technical Webinar on Role of Embedded Controller in Design of Smart IoT system on 6-7-23 by Dr.J. Anish Kumar. (Online)
- Workshop on Design of PCB Boards using Eagle Software for Embedded Applications ,30-8-23, by Dr. J. Anish Kumar at Saveetha Engineering College.
- Workshop on SMT ASSEMBLY LINE PROCESS,21-9-23, by Dr.J. Anish Kumar at Saveetha Engineering College
- Workshop on PCB Design, Manufacturing and SMT Assembly on 28-10-23 and 30-10-23 by Dr.J. Anish Kumar at Saveetha Engineering College
- Workshop on IoT based Home Automation system using ESP32 controller and Mobile App on 2-3-24 by Dr.J. Anish Kumar at Saveetha Engineering College

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Electromagnetic fields” on 7th to 19th Nov 2005 at KSR College of technology, Tiruchegodu
- “ Power electronics” on May 2nd ,3rd 2007 at Jerusalem college of Engineering ,Chennai-600100
- “Electromagnetic Theory” on 25th April 2008 at Valliammai Engineering college, Kattankulathur- 603203
- Hands on with ARM Programming Embedded Systems ,2nd to 13th Nov 09 ,CDAC
- FDP on Applications & Design of Low Power Embedded System, during 6th to 19th May 2013 at Rajalakshmi Institute of Technology.
- One-day Faculty Training Program on LABVIEW Organized by Saveetha Engineering College on 28th Feb 2014.
- FDP on Embedded Systems with ARM 7 Microcontrollers Conducted by Pantech Pro Ed Pvt Ltd at Sri Sairam Engineering College during 25th & 26th June 2015.
- FDP on Building Embedded Systems with ARM Cortex- MCU Conducted by UTL Technologies Ltd, Bangalore at Saveetha Engineering College during 29th & 30th Oct 2015
- Two week DST –NIMAT sponsored FDP on Recent Trends in Advanced control of Power Electronics and Power Systems, held during November 14th to 25th 2016, conducted by VIT University –Chennai.
- FDP on EE6302 – Electro Magnetic Theory held on 23rd and 24th June 2017 organised by Department of EEE, Loyola Institute of Technology, Chennai - 602123
- One day FDP on Insights into Research held on 29th June 2017 conducted by Department of Mechanical Engineering, SRM University, Chennai – 603203
- FDP on Basics Electrical Electronics and Instrumentation Engineering held during 27th November to 1st December 2017, Conducted by Department of EEE, Panimalar Engineering College, Chennai.
- “FDP on Skill Development in Research Projects and Patent Filing” held on 17th February 2018, conducted by Department of Science and Humanities, Saveetha Engineering College, Chennai -602105
- FDP on Mobile Application Development held on 23rd to 25th April 2018 conducted by Department of Computer Science, Saveetha Engineering College, Chennai -602105
- “Two weeks AICTE sponsored FDP on Challenges of Integrating Wind and Solar into the Electricity Grid using ICT “held during 14th June to 27th June 2019, conducted by Department of EEE, RMK Engineering College.
- FDP at Teaching Learning Centre, held during 27th -29th November 2019 at IIT Madras
- FDP on Control System, held during 2nd to 7th December 2019 at Easwari Engineering College.
- FDP on Data and Image Augmentation for Deep Learning Applications held on 19th August 2022 at Aalim Muhammed Salegh College of Engineering, Chennai.
- Webinar on How to do Rapid SCI Journal Publication held on 18th March 2023 at at Aalim Muhammed Salegh College of Engineering, Chennai.
- Workshop on Designing and Modelling of IoT, AI & ML Systems held during 1st August to 5th August 2022 organized by AICTE, ATAL Academy, ARM Education and STM microelectronics.
- Train the Trainer program on Powering IoT using Arduino & Raspberry Pi held during 19-9-2022 to 23-9-2022 at MIT, Chrompet, Chennai.
- Online National level workshop on Power Electronic converters- Simulation Using MATLAB & Python held during 27th February to 3rd March 2023 organized by G.Pullu Reddy Engineering College, Andhra Pradesh.

- Online FDP on Advance Technologies in Electrical Engineering Research held during 1-8-2022 to 5-8-2022 organized by Sai Ram Institute of Technology, Chennai.
- Online FDP on Inculcating Universal Human Values in Technical Education held during 2nd to 6th August 2021 organized by AICTE.
- Internet of Things Master Class held on 19th Sep to 18th Oct 2021 at Pantech E Learning Pvt Ltd, Chennai.
- Online STTP on Avenues for Energy Conservation in Residential Building held during 24-01-2022 to 31-01-2022 conducted by CEG campus, Anna University, Chennai -25.
- FDP on SCILAB and XCOS- FOSS Alternatives for MATLAB and Simulink held during 7-2-2022 to 11-2-2022 at CMR Institute of Technology, Bengaluru.
- STTP on Emerging Technologies in Electrical and Electronics Engineering held during 11-9-23 to 15-9-23 at Bharath Institute of Science and Technology.
- 5 days International Faculty Development Program on Future Trends and Advances in Electrical sciences held during 09-10-23 to 13-10-23 at Bharath Institute of Science and Technology.
- 5 days International Faculty Development Program on NLP, Computer Vision and Artificial Intelligence held during 04-12-23 to 08-12-23 in online organized by Andhra Pradesh State Skill Development Corporation (APSSDC) in Collaboration with Excel Edtech Pvt. Ltd
- “International FDP on Emerging Trends in IT” held during 4-12-23 to 11-12-23 I online organized by SHASUN Jain College for Women, Chennai.
- 5 Days FDP on Sustainable Lighting Design in Modern Industry using DIALux Evo organized by Saveetha Engineering College, Chennai from 31-01-2024 to 04-01-2024.
- Five Days Faculty Development Program on Modern & Innovative Tools in Engineering Education organized by Techno College of Engineering Agartala in association with Computer Society of India,online, from 4-3-2024 to 8-3-2024.
- Emerging Technologies for Power Quality “ on 15th Sep 2006 at Misrimal Navajee Munoth Jain Engineering college
- “ Pollution of Power Supply – Causes and Mitigation” March 21st ,22nd -2007 at college of engineering ,Anna university ,Chennai-25
- “ VLSI Design “ on July 21st,2007 at Saveetha Engineering College ,Thandalam Chennai - 602105
- “ TRIZ Methodology for Product /Process innovation” on 19th DEC 2007 at at Saveetha engineering college ,Thandalam Chennai -602105
- “Embedded Microcontrollers” on 24th Jan 2008 at Jerusalem college of Engineering ,Chennai-600100
- “ MATLAB Programming” on 19th July 2008 at Saveetha Engineering College , ,Thandalam , Chennai- 602105
- One day Workshop on ARM Processor on 22nd august 2009 at Veltech Multitech Engineering College
- National Level Workshop on Electrical Machines on 25th Aug 2009 at St.Joseph’s College of Engineering.
- ISO 9001:2008 Internal Auditing Training Conducted by BMQR Certifications Pvt Ltd at Saveetha Engineering College on 4th April 2011.
- One day Faculty Workshop on Signal and Image Processing , held on 30th April 2011 at Saveetha Engineering College
- National Workshop on Renewable electrical Energy systems during 14th & 15th Sep 2012 at SSN College of Engineering

- Two day ISTE Workshop on Aakash for Education Conducted by IIT Bombay on 10th & 11th NOV 2012
- Two day workshop on Network simulation Tools during 1st & 2nd March 2013 at Anna University, Chennai.
- Workshop on Network Simulator- QUALNET 19th April, Velammal Engineering college
- Two week ISTE Workshop on DBMS Conducted by IIT Bombay during 21st to 31st May 2013.
- Two day workshop on Trends & developments in signal processing and its application during 19th & 20th Aug 2013 at SSN College of Engineering.
- Educators Day 2013 conducted by national Instruments on 2nd Sep 2013
- Mission10X –UTLP Practitioner Training Program Conducted at Wipro Technologies, Bangalore during 25th to 29th Nov 2013.
- One day National Level Workshop on Embedded System Application Using ARM at VIT Chennai on 13th Dec 2013.
- Two week ISTE Workshop on Signals & Systems Conducted by IIT Kharagpur during 2nd -12th Jan 2014.
- Workshop on Recent Trends in Network Simulation Tool Organized by Saveetha Engineering College during 30th & 31st Jan 2014.
- National Seminar on Investors Awareness Organized by Saveetha Engineering College on 6th Feb 2014.
- Two week ISTE Workshop on Control Systems Conducted by IIT Kharagpur during 2nd -12th Dec 2014.
- Mission10X –UTLP Expert workshop Conducted at Wipro Technologies, Bangalore during 19th to 23rd Jan 2015.
- Mission10X –Engineering faculty Workshop Conducted by Wipro Technologies, at Saveetha Engineering College ,Chennai during 2nd to 4th Feb 2015
- One day National Level workshop on Research Prospective an Insight to proposals and patents, held on 27th February 2016,Conducted by Department of ECE , Saveetha Engineering College-Chennai.
- One Day hands on Training in LATEX held on 4th February 2017, conducted by Department of Mathematics , Saveetha Engineering College, Chennai -60210
- Nation Level Short Term Training Program on Advance Softwares for Power system simulation studies held on 3rd may to 5th May 2017 ,Conducted by Department of EEE, SSN college of Engineering, Kalavakkam – 603110.
- Foundation program in ICT for Education (FDP101x) held from March 8th 2018 to April 12th 2018 conducted by IIT Bombay,at Saveetha Engineering College, Chennai -602105
- National seminar on Research and Innovations in Nanoscience and Nanotechnology held on 21st April 2018 ,conducted by Department of Chemistry, Saveetha Engineering College, Chennai -602105
- Pedagogy for online and Blended Teaching Learning Process (FDP201x) held from May 3rd 2018 to May 30th 2018 conducted by IIT Bombay,at Saveetha Engineering College, Chennai - 602105
- One day Workshop on Arduino organized by IIT Bombay ,held on 8th February 2020 at Saveetha Engineering College, Chennai -602105
- Reference Management & Knowledge Organization for Journal Writing, Dec 10th to 14th 2018, 5 days,AMS college of Engineering ,Chennai

- Research Paper Writing on Using Journaling tools, 07.01.2019 to 11.01.2019,5 days, AMS College of Engineering, Chennai.
- Programming for Deep Learning and Machine Learning Algorithms, April 2nd to 7th 2020,5 days, Chase Technologies
- Art of writing research paper, April 29th 2020, Webinar, Chennai Institute of Technology
- Seminar on “Energy Security in the age of Energy Transition Balancing Reliability and sustainability” held during 14-12-2023 at Saveetha Engineering College, Chennai.

PROFESSIONAL MEMBERSHIPS:

- Indian Society for Technical Education (ISTE) - LM 54900
- International Association of Engineers (IAENG) - M 164797
- The Institution of Engineers (India)-(IEI) – M 1749891
- The Institution of Green Engineers(IGEN) – M 14498