CURRICULUM VITAE

Dr. Deepika K C

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Objective:

Be affiliated with a prestigious institution in improving the standards of profession and empowering them with necessary skills, qualities, knowledge, attitude, and value of time.

Technical Strength

- Proficient in Signal Processing & Image processing.
- > Optical Fiber and Microwave Communication.
- Antenna & wave Propogation.
- Proficient in VLSI circuits.
- Familiar with Digital, Analog and Linear Integrated circuits.
- Machine Learning and Deep Learning.
- Artificial Intelligence.

Research Areas of Interest

- Machine Learning
- > Artificial Intelligence
- Deep Learning
- Pattern Recognition

Academic Qualification

Qualifications	Specialization	College/ University	Year of passing	Percentage
Ph.D	AI&ML	VTU,Belgaum	2023	
M.Tech.	DECS	VTU,Belgaum	2011	76.66%
BE	E&C	UVCE, Bangalore.	2009	71.41%
PUC	PCMB	Government Independent PU 2005 College, C.N. Halli.		91.50%
SSLC	State Board	D.V.P.B.H.S, C.N. Halli 2003 87.9		87.91%

➤ **Ph.D**. (Electrical and Electronics Engineering Sciences): Visvesvaraya Technological University.

Advisor: Dr. G Shivakumar, Vice Principal & Professor, Dept. of E&C, AMC Engineering College, Bangalore. Research Center: Dept. of E&I, Malnad College of Engineering, Hassan.

- Thesis Title: Touchless 3D Finger Image Analysis using Deep Learning Architecture. (2017-2023)
- ➤ M.Tech (FCD): (Digital Electronics And Communication Systems) (VTU), Malnad College of Engineering, Hassan (2009-2011)
- ➤ **B.E** (**FCD**): Electronics and Communication Engineering, University Visveswaraya College of Engineering (UVCE), Bangalore University, Bangalore (2005-2009).

Work Experience(Teaching-11Years)

Sl.	Name of the Institute	Designation	No. of Years
No.			
1.	Malnad College of Engineering, Hassan		10 Years Sep-2014 till date
2.	Malnad College of Engineering, Hassan	Assistant Professor	1 Year Sep-2011 to June 2012

Research Experience (7 Years)

Research Center: **Dept. of E&I, Malnad College of Engineering** - Worked as a Research Scholar in the research center Dept. of E&I, Malnad College of Engineering, Hassan in the research area of "Image Analysis using Deep Learning" for **7 years** from July-2016 to Nov-2023. Published research papers in various Scopus and WOS indexed journals.

Industrial Training

• Completed 15 days of Industrial Training in KMF, Hassan.

<u>Patents</u>

- 1. Title: **AI based Automatic Whether Prediction system to predict rainfall using machine learning algorithms systems using cloud and machine learning algorithms.** Application No. 202421022719.Indian Patent, Publication date: 19/03/2024.
- 2. Title: **Surgical Waste Collection Robot for OTs**, United Kingdom Design UK.D.A. No.: 6362660, Grant date:7/05/2024

Journal Publications

1. "Local Pre-Conditioning and Quality Enhancement to Handle Different Data Complexities in Contactless Fingerprint Classification" published in the Journal-International Journal of Advanced Computer Science and Applications, Vol. No 13, Issue No 8, Page No. 653-661, Impact factor 1.16, Scopus indexed (Q3) and year of publication 2022 published by thsai.org with DOI: http://dx.doi.org/10.14569/IJACSA.2022.0130875

- 2. "A Study on Structural and Textural Feature Extraction for Contactless Fingerprint Classification" published in the Journal-Indian Journal of Science and Technology, Vol. No 15, Issue No 44, Page No. 2375- 2385, Impact factor 0.8, Web of Science indexed and year of publication 2022 published by thsai.org with DOI: https://doi.org/10.17485/IJST/v15i44.1471
- 3. "A Robust Deep Features Enabled Touchless 3D Fingerprint Classification System." published in the Journal SN Computer Science, Scopus indexed (Q2) Vol. No 2, Issue No 263, and year of publication 2022 published by Springer with DOI: https://doi.org/10.1007/s42979-021-00657-x.

Book Chapters

 "Towards More Accurate Touchless Fingerprint Classification Using Deep Learning and SVM" published in the Journal Data Science and Computational Intelligence Communications in Computer and Information Science, Vol. No 1483, Chapter No 20, Impact factor 0.49, Scopus indexed (Q4) and year of publication 2021 published by Springer with DOI: https://doi.org/10.1007/978-3-030-91244-4_20

Paper publication in Conferences

- "Touchless 3D Fingerprint Classification: A Systematic Survey", Deepika K C, Dr. G. Shivakumar. 2018 Third International Conference on Electrical, Electronics, Communication Computer Technologies, and Optimization Techniques (ICEECCOT), 14-15 December 2018. GSSS, Mysore.
- K. C. Deepika and G. Shivakumar, "Hybrid CNN-Ensemble based Classifier for Touchless Fingerprint Classification," 2021 IEEE Mysore Sub Section International Conference (MysuruCon), 2021, pp. 482-486, doi: 10.1109/MysuruCon52639.2021.9641718

Workshops/Conferences Attended

- 1. Participated in workshop on "India's Achievement in Space Technology and Social Development in Technical Education" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 16th October 2014.
- 2. Participated in workshop on "Hands on Experience on ANSYS HFSS" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 28th October 2014.
- 3. TEQIP-II sponsored three days faculty development programme on "Pedagogical Training Programme for Faculty Members" organized by Department of Electrical & Electronics Engineering, MCE, Hassan, held during 15th to 17th December 2014.
- 4. TEQIP-II sponsored five days faculty development programme on "Storage Area Networks and Data Management" organized by Department of Computer Science And Engineering, MCE, Hassan, held during 22nd to 26th December, 2014.

- 5. Participated in workshop on "Recent Trends in Antenna Research & Communication Technology" organized by Department of Electronics and Communication & E & I Engg, Malnad College of Engineering, Hassan, on 6th & 7th April 2015.
- 6. Participated in TEQIP-II Sponsored workshop on "Two days hands on training on DSP TMS320C6713" on 21st and 22nd March 2016 Organized by Department of Telecommunication Engineering, Dr. Ambedkar Institute of Technology, Bengaluru.
- 7. Participated in TEQIP-II Sponsored one week workshop on "Pedagogical training- FEEL TEACHER" on 6th and 11th June 2016 Organized by MCE Hassan.
- 8. Participated in TEQIP-II and SPFU Component 1.2 Sponsored one week workshop on "Pedagogical training programme" on 11th and 15th July 2016 Organized by MCE Hassan.
- 9. Participated in FDP on "Digital Signal, Image processing and Pattern Recognition using SCILAB" from 27th 29th of September 2016 Organized by Department of Electronics and communication Engineering, PESUniversity, Bengaluru.
- 10. Participated in TEQIP-II Sponsored workshop on "Sensor Design and Implementation" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 4^h & 5th Feb 2017.
- 11. Participated in TEQIP-II Sponsored workshop on "Virtual Laboratory" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 16th Feb 2017.
- 12. Participated in TEQIP-II Sponsored workshop on "Internet Of Things on Real Time Applications" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 13th & 14th March2017.
- 13. Participated in TEQIP-II Sponsored workshop on "Hands on training on Cadence VLSI design tool" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 18th & 19th March2017.
- 14. Participated in TEQIP-II Sponsored workshop on "Robotics and Embedded Systems" organized by Department of Electronics and Communication, MalnadCollege of Engineering, Hassan, on 23rd & 24th March 2017.
- 15. Participated in TEQIP-II Sponsored workshop on "Image Processing and Pattern Recognition Techniques" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 24th & 26th March2017.
- 16. Participated in TEQIP-II Sponsored workshop on "Hands on training on NETSIM" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 27th March 2017.
- 17. Participated in TEQIP-III Sponsored one week FDP on "MEMS & MOEMS" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, from 30th of April to 4th of May 2018.

- 18. Participated in TEQIP-III Sponsored one week FDP on "Machine Learning" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, from 28th of June to 2nd of July 2018.
- 19. Participated in TEQIP-III Sponsored one-week Interdisciplinary FDP on "Recent Developments in solar & Wind Energy system for on/off Grid Applications" organized by Department of Electrical and Electronics Engineering, Malnad College of Engineering, Hassan, from 9th to 13th of July 2018.
- 20. Participated in TEQIP-III Sponsored 2- day workshop on Outcome-based Education [OBE] organized by Malnad College of Engineering, Hassan, from 4-5 August 2018.
- 21. Participated in TEQIP-III Sponsored workshop on "Machine Learning" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 29th & 30th September 2018.
- 22. Participated in TEQIP-III Sponsored FDP on "Being a Great Teacher" organized by Department of Mechanical Engineering, Malnad College of Engineering, Hassan, from 3rd & 4th November 2018.
- 23. One day programme on "**FEEL Teacher Developing, Counseling, mentoring**" organized by MCE, Hassan and conducted by College of Leadership and HRD, Mangalore at MCE Hassan on 2nd November 2019.
- 24. TEQIP-III sponsored one day workshop on "Application of Probability in Engineering", organized by the Department of Mathematics and Department of Electronics and Communication Engineering, at Malnad College of Engineering, Hassan, on 5th November 2019.
- 25. Participated in AICTE Sponsored two weeks FDP on "Green, Smart, 5G Technologies" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, from 9-12-2019 to 21-12-2019.
- 26. Successfully completed **IUCEE International Engineering Educator Certification Program**, Spring 2020.
- 27. Participated in Five days AICTE Training and Learning (ATAL) Academy online FDP on 'Computer Science & Biology' from 2021-1-19 to 2021-1-23 at Malnad College of Engineering, Hassan.
- 28. Participated in AICTE sponsored one week online short-term training program entitled 'Empowering the Moral values, Ethics and Behavioral attitude in teaching skills among the teachers' from 2021-2-19 to 2021-2-23 organized by Department of E&C Engineering, Dr. N.G.P Institute of Technology, Coimbatore.
- 29. AICTE Training And Learning (ATAL) Academy Online FDP on **Quantum and Photonics** from 29th Nov to 3rd Dec 2021 Institute: Malnad College of Engineering Hassan.

- 30. AICTE Training And Learning (ATAL) Academy Online FDP on " **Real Time Problems** And Solutions With Ai & Ml Using R Programming" from 06/12/2021 to 10/12/2021. Institute: Galgotias University.
- 31. One Week AICTE VTU Joint Training Programme for Teachers on "An Overview of Teaching Techniques in Basics of Electronics and Communication Engineering" on 13th to 17th December 2021 Organized by VTU Human Resource Development Centre (VTU HRDC), Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur (Dist.)
- 32. AICTE Training and Learning (ATAL) Academy Online FDP on "Research Challenges in Atmospheric Sciences with a Computing Edge" from 20/12/2021 to 24/12/2021. Institute: M S Ramaiah Institute of Technology.
- 33. Participated in Five days online FDP on 'Analog and Digital IC Design: Semiconductor Industry Approach' jointly organized by Atria Institute of Technology and Entuple Technologies from 26th-30th September 2022.
- 34. Participated in one day workshop on 'Intellectual Property Rights and Cyber Law' organized by Department of Electronics and Communication Engineering, Malnad College of Engineering, Hassan on 17th October 2022.
- 35. Participated in one-week online workshop on 'National Energy conservation week' organized by Energy Club in association with Institution's Innovation Council from 14th-20th December 2022.
- 36. Participated in One Week National Level Online Faculty Development Program on **Societal Applications of Machine Learning** from 26th-30th December 2022 organized by the department of CSE at Shri Vishnu Engineering College for Women (A), Bhimavaram.
- 37. Participated in One Week National Level Online Faculty Development Program on **Recent Advances in Data Science, Data Analytics and Cyber Security** from 1st-5th March 2023 organized by the department of CSE at Shri Vishnu Engineering College for Women (A), Bhimavaram.
- 38. Participated in 5 Day Faculty Development Program on **Salesforce Platform Developer 1** conducted by ICT Academy from 29th May 2023 to 2nd June 2023 at Malnad College of Engineering, Hassan.
- 39. Participated in **3 weeks** workshop on **Empowering Aspiring Women Entrepreneurs in: Sustainable & Eco-Friendly, Digital & E-Commerce Sectors** organized by JSSATEB STEP supported by Department of Science & Technology, Govt. of India from 7th Feb to 23rd Feb 2024.

Conferences/Symposiums Organized

1. Co-ordinated **National Symposium** organized by IEEE ComSoc chapter, IEEE student chapter in association with science association hosted by Department of E & C, Malnad college of Engineering, Hassan from 20th February 2024 to 24th February 2024.

2. Co-ordinated **IEEE MysuruCon 2023** being a co- chair hosted by Department of E & C, Malnad college of Engineering during 1st and 2nd of December 2023.

Workshops/Events Organized

- 1. Co-ordinated TEQIP-II Sponsored workshop on "Hands on training on Cadence VLSI design tool" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 18th & 19th March 2017.
- 2. Co-ordinated TEQIP-II Sponsored workshop on "Hands on training on NETSIM" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 27th March 2017.
- 3. Co-ordinated TEQIP-III Sponsored one week FDP on "Machine Learning" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, from 28th of June to 2nd of July 2018.
- 4. Co-ordinated TEQIP-III Sponsored workshop on "Machine Learning" organized by Department of Electronics and Communication, Malnad College of Engineering, Hassan, on 29th & 30th September 2018.
- 5. Conducted 1 week (30 hrs) value added course for first year ECE students on 8051 Microcontroller from March 2nd to March 7th 2024.

Certification (MOOC) Courses

- ➤ "Deep Learning" 12 weeks NPTEL Swayam course with 73% from July-October 2023.
- ➤ Completed IUCEE International Engineering Educator Certification Program, Spring 2020.

Responsibilities Held

College Level

- NSS Co-ordinator
- PG Coordinator
- First year Coordinator

Department Level

- NBA co co-ordinator
- NAAC co co-ordinator
- BOS & BOE Member

PROFESSIONAL ACTIVATES

- PG Seminar, Internship, mini project and main Project Coordinator.
- Guided more than 20 UG main projects/miniprojects
- Resource person for value added course for first year ECE students on 8051 Microcontroller.
- Judge For "**Prastuti**" Technical Paper Presentation Competition organized by Dept. Of E&I, MCE, Hassan.
- Judge for "Enigma" National level Technical Paper Presentation Competition organized by Malnad College of Engineering.

- Worked as External Examiner for Practical Examination in the dept. of E&I.
- Question Paper Setting for Autonomous Institutions.

Review Activity

- Peer reviewer for two articles for **ICRTEC 2023**-International Conference on Recent Trends in Electronics and Communication, hosted by the Department of Electronics and Communication. The National Institute of Engineering in Association with IEEE Bangalore Section and Musuru subsection, held from 10th to 11th February 2023.
- Peer reviewer of article "A Comparative Study of Feature Extraction Technique for Image Processing using CNN and SVM" for AICTE Sponsored IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON) is organized at Nitte Meenakshi Institute of Technology, Bengaluru INDIA during 1st and 2nd September 2023 in association with IEEE Bangalore Section.
- Peer reviewer for two articles for **ICDSNS-2023** IEEE International Conference on Data science and Network Security organized by KIT, Tiptur, 28th -29th July 2023.

References

- **1.** Dr. G Shivakumar, Vice-Principal, Department of E&C., AMC Engineeing college, Bengaluru. Email id: gsk@gmail.com
- **2.** Dr. Murthy Mahadev Naik, Associate Professor, Department of E&C, Malnad college of Engineeing, Hassan. Email id: mmn@mcehassan.ac.in

Personal Details

Nationality: Indian
Date of Birth: 25/01/1988
Marital Status: Married

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Other Interests: Vedic Maths, Traveling and Trekking.

The information contained herein is true to my knowledge.

Dr. Deepika K C