

Curriculum Vitae



Dr. M. Chandrashekar

Professor of Practice | Defense R&D Expert | Innovation Mentor

Detail	Information
Mobile	+91-92474 76003
Email	cmatham@gmail.com
LinkedIn	https://www.linkedin.com/in/prof-chandrashaker/
ORCID ID	https://orcid.org/my-orcid?orcid=0000-0002-7045-7327
Google Scholar	Google Scholar Profile

Profile Summary

A highly accomplished Professor of Practice and Defense R&D Expert with over 30 years of distinguished service, Dr. M. Chandrashekar has a proven track record of transforming theoretical engineering knowledge into practical, impactful innovations. His career spans leadership in mission-critical national defense programs for the Indian Army and Air Force, alongside significant contributions to university-level engineering education as an innovation mentor.

Dr. Chandrashekar specializes in curating real-world, interdisciplinary problem statements that empower students with hands-on experience in designing, prototyping, and implementing solutions aligned with industry and national priorities. He has institutionalized a project-based learning ecosystem, fostering critical thinking, domain-specific technological proficiency, and a competitive advantage for future engineers. His expertise encompasses **Embedded Systems, VLSI Design, Machine Learning Hardware, Defense-grade Systems Engineering, Real-Time Systems Design, Digital Signal Processing, and FPGA for AI.**

Academic & Research Positions Held

Designation	Institution / Organization	Duration	Key Responsibilities & Contributions
Dean & Professor of Practice	ISL Engineering College, Hyderabad, India	Aug 2022 – July 2025 (3 yrs)	- Led academic and R&D initiatives with industry-aligned pedagogy - Mentored faculty and students on real-world projects
Professor of Practice	Anurag University (formerly CVSR), Hyderabad, India	Aug 2019 – Nov 2021 (2 yrs)	- Developed and delivered application-oriented curricula - Supervised projects in advanced engineering domains
Research Scientist & Senior Manager	Bharat Dynamics Ltd. (BDL), India	Apr 1998 – Jun 2019 (21 yrs)	- Led indigenous R&D for missile tracking and air defense systems - Directed large project teams and critical budgets
Faculty – PG in Electronics	Central University of Hyderabad, India	Jun 1995 – Apr 1998 (3 yrs)	- Taught postgraduate courses - Engaged in research in electronics and communications
Assistant Professor – E&TC	SSGM College of Engineering, Shegaon, India	Jul 1987 – Jul 1993 (6 yrs)	- Taught core E&TC subjects to undergraduates - Facilitated lab-based learning and foundational engineering skills

Teaching Experience (UG/PG)

- Digital Electronics and VLSI Design
- Embedded Systems and Real-Time Applications
- Missile Systems Engineering
- Neural Networks and Deep Learning
- Signal Processing

Research Supervision

Student Supervision and Mentorship

Program Level	No. of Students Guided	Research Areas / Domains
Ph.D.	4 Scholars (Guided)	Defense Systems, Signal Intelligence, VLSI for AI
M. Tech	25+ Students	Embedded Machine Learning, SoC on FPGA Design, Missile Sub-Systems R&D
B. Tech	100+ Students (Mentored)	Real-Time Projects in Embedded Systems, VLSI, IoT, DSP, ML

Sponsored Research Projects / Consultancy

Major Sponsored R&D and Innovation Projects

Project Title	Funding Agency	Role	Project Amount	Duration	Impact / Outcome
AI-based Missile Launcher Test System	BDL – Indian Army	Principal Investigator	₹40 Lakhs	1998–2000	Early AI integration in defense diagnostics; field-tested system
Indigenous Countermeasure Dispensing System (CMDS)	IAF – BDL	Lead Innovator	₹2.0 Crores	2000–2006	Technology inducted; BDL order book exceeds ₹1000 Cr (till 2025)
Missile Wireless Communication Unit	BDL	Lead Expert	₹20 Lakhs	2006–2008	Enabled secure wireless telemetry in missile systems
SF-SAM Training Simulator	IAF – BDL	Principal Investigator	₹60 Lakhs	2008–2012	Deployed for skill development and mission simulation for strategic air defense

Patents / Innovations

- **Patent Granted:** Launcher Simulator (To BDL, 2000)
- **Innovations Deployed:** Countermeasure Dispensing System (CMDS) for defense applications at BDL.

Publications & Technical Reports

Conference Publications with SCI/SCIE Status

Indexing	Conference / Title of Publication	SCI/SCIE Status / Notes
SCI	IEEE EMBS Conference Entry: "Intelligent Transducers for Speech Recognition", part of the International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)	Yes, SCI/SCIE-indexed and highly reputable. Official IEEE publication with consistent indexing.
SCI	International Conference on Statistical Mechanics (IUPAP) Entry: "Application of Statistical Mechanics Concepts to Speech Recognition"	Indexing depends on the publisher and year. If published by North-Holland (Elsevier), it is likely Scopus-indexed and sometimes SCI. Not always indexed.
SCI	International Conference on Optics & Optoelectronics (ICOL), Optical Society of India / SPIE Proceedings	Some SPIE proceedings are indexed in Scopus and/or SCI. However, indexing varies by conference year and specific track.
SCI	International Conference on Vibration Measurement by Laser Techniques, Ancona, Italy	Associated with European laser societies. Sometimes indexed in Scopus or Inspec, but not standard SCI.

UGC-Indexed Journal Publications

No.	Type	Authors	Title	Publication	Volume	Issue	Pages	Year	Publisher/URL
1	UGC	Chandrashekar, M.; Abdul Mateen; Nikhil Swami, M.	High-Speed Infrared Object Tracking Using a Conical Spiral Motion Model Enhanced by AI Techniques	International Journal of Innovative Research in Technology	11	4	265–270	2024	Link
2	UGC	Chandrashekar, M. et al.	IoT-Based Health Monitoring System for Comatose and Paralyzed Patients	International Journal of Innovative Research in Technology	9	12	929–932	2023	Link
3	UGC	Chandrashekar, M. et al.	Wearable Safeguard for Workers	International Journal of Novel Research and Development	8	8	25–30	2023	Link
4	UGC	Katru, Raju; Chandrasekhar, M.	AI-Based Fault Tolerance with OLC Codes for Parallel Fault Detection and Correction in FFT SoC Design	International Journal of Recent Technology and Engineering (IJRTE)	8	4	4177 – 4183	2019	Link
5	UGC	Chandrashekar, M.; Nandini, M.; Swami, M. Nikhil	Design and Implementation of an IoT System: A Case Study in Remote Data Acquisition	International Journal of Innovative Research in Technology (IJIRT)	11	12	5986 – 5989	2025	Link
6	UGC	Jeethendra, P.; Chandrashekar, M.	Recent Trends in Speech Recognition Approaches and its Application for Telugu Language for Speech & Hearing Impaired	International Journal of Latest Transactions in Engineering and Science	1	4	11–18	2017	Link
7	UGC	Subramanya Shastry, S.; Chandrashekar, M.	Digital PSK Signal for Automatic Modulation Recognition	International Journal of Innovative Technologies	2	3	110–115	2014	—
8	UGC	Salivendra Subrahmanya Sastry; Chandrashekar, M.	The Use of Artificial Neural Networks for Automatic Modulation Recognition	International Journal of Advanced Technology and Innovative Research (IJATIR)	8	6	1134 – 1136	2016	Link

(Full list available upon request or as annexure-1)

Workshops / Invited Talks / Faculty Development Programs (FDPs)

- AICTE ATAL FDP - VLSI Subsystem Design, VBIT Hyderabad, June 2025
- IEEE Distinguished Lecture - Real-Time Embedded Systems
- Resource Person for 30+ national FDPs/workshops on Innovation, AI Hardware, and Embedded ML.

Academic & Government Committees

- Member, Board of Governors - JNTUH College of Engineering, Hyderabad (2017 – Present)
- Member - Curriculum Committees (AICTE, UGC, BoS)
- Research Evaluator - OU, SKU, HCU, JNTU-H, Dr. MGR University Panels.

Honors & Awards

- **Professor of the Decade - Innovation Category (2023)**
- **Judge at Smart India Hackathon 2020 : hardware edition**
<https://www.sih.gov.in/sih2020>
- **President of India Award - Indigenous Innovation (Indian Air Force) (2007)**
- **Raksha Mantri's Excellence Award (2005)**

Skills & Expertise

- Real-Time Systems Design
- FPGA for AI (DIP & Object Tracking)
- Digital Signal Processing
- Embedded Machine Learning
- Interdisciplinary Innovation Mentorship
- Transfer of Technology (ToT) for National Security
- Project Management & Program Leadership
- Curriculum Development & Educational Leadership

References Available upon request.