Milav Jayeshkumar Dabgar

Engineering Educator

milav.dabgar@gmail.com • linkedin.com/in/milavdabgar • github.com/milavdabgar • milav.in

youtube.com/@milav.dabgar • instagram.com/milav.dabgar • Palanpur, Gujarat, India

Executive Summary

Engineering educator with **10+ years** experience spanning electronics hardware, embedded systems, AI/ML, and full-stack software engineering. Currently pursuing **BS in Data Science from IIT Madras** and recently completed the **AICTE QIP PG Certificate in Deep Learning (Rank 1)**. Distinguished by exceptional student mentorship enabling teams to secure **Rs. 45+ lakhs in innovation funding** (Shark Tank India), resulting in **2 student patents**. Working toward **doctoral research in embodied general intelligence and robotics**.

Research Interests

Embodied General Intelligence & Robotics: Cyber-Physical Systems, Medical Deep Learning, and AI-Driven Automation.

Professional Experience

Lecturer (ECE & ICT) — **Nov 2016 – Present**
Government Polytechnic, Education Department - Government of Gujarat — *Palanpur, Gujarat*

- Lead technical education across Programming, Embedded Systems, Circuit Design, and Entrepreneurship
- Hold key positions: **IT Convener**, **SSIP Co-Convener**, **Training & Placement Member**
- Mentored teams securing **Rs. 25 lakhs from Shark Tank India** and **Rs. 20 lakhs government funding**, resulting in **2 patents**
- Architected a dual-platform ecosystem: an **Astro public website** (gppalanpur.ac.in) and a secure **Next.js Academic Management System** on self-hosted Dockerized Linux infrastructure with automated CI/CD
- Manage an educational YouTube channel producing localized (Gujarati) lecture series of my calssroom recording and AI-generated audio overviews

Electronics & Communication Engineer (R&D) — **Jul 2015 – Oct 2016**
TEXEG India Private Limited (Japan-based Technology Firm) — *Gandhinagar, Gujarat*

- Led end-to-end product development for commercial embedded systems in international R&D environment
- Executed circuit simulation, PCB design, firmware development, and control algorithms (PID, PI, Fuzzy Logic)

Education

AICTE QIP PG Certificate in Deep Learning — **2025**
Sardar Vallabhbhai National Institute of Technology (SVNIT) — *Rank: 1 | CGPA: 10/10*

Bachelor of Science in Data Science and Applications — **2021 – Present**
Indian Institute of Technology Madras (IIT Madras) — *Overall CGPA: 7.01/10*

Master of Engineering, Communication Systems — **2013 – 2015**
L.D College of Engineering, Gujarat Technological University — *CGPA: 8.04/10*

Bachelor of Engineering, Electronics & Communication — **2009 – 2013**
Sal Institute of Technology, Gujarat Technological University — *CGPA: 7.28/10*

Technical Expertise

Programming: Java, Python, JavaScript, C/C++, R, SQL
Web Development: Astro, Next.js, React.js, Vue.js, Flask
Data Science & ML: TensorFlow, PyTorch, Scikit-learn, Pandas
Infrastructure: Linux, Docker, CI/CD, Git, Self-hosted Solutions
Embedded Systems: Microcontrollers, FPGA, PCB Design
Tools: MATLAB, Simulink, EagleCAD, DaVinci Resolve Studio

Key Projects & Achievements

Institutional Web Portal | ***Astro, JavaScript*** — **2026 – Present**

- Developed the public-facing institutional website (gppalanpur.ac.in) using the Astro framework for exceptional performance.

Smart Academic Portal | ***Next.js, Docker*** — **2025 – Present**

- Production internal academic management system for authenticated students and faculty with complete workflows.

LogicCraft AMC Platform | ***Vue.js, Flask, RAG*** — **2026**

- Full-stack IT service platform with AI-powered RAG assistant and role-based ticketing.

IT Service Tracking & Cost Management (Best BDM Capstone) | ***Python, Pandas*** — **2025**

- Data-driven IT optimization blueprint analyzing 8 months of logs, achieving top honors in the IIT Madras BS program.

FPGA Image Steganography | ***FPGA, Verilog*** — **2015**

- Hardware implementation published in **International Journal of Computer Applications**

Certifications & Recognition

Best BDM Capstone Project Award for *"Turning 8 Months of Data into a Blueprint for Better IT Service"* (IIT Madras BS) - Featured by Program Coordinator, Prof. Andrew Thangaraj

NPTEL EVANGELIST (2020) - Top recognition for exceptional contribution to online learning ecosystem

NPTEL DISCIPLINE STAR - Computer Science (2019, 2020) - Top 1% performer nationally

24 NPTEL Course Completions with 18 Elite Performances across AI, Data Science, and Programming domains

Student Innovation Excellence: Mentored 50+ projects, Rs. 45+ lakhs funding secured, 2 patents filed