# Milav Jayeshkumar Dabgar

Engineering Educator & R&D Professional

## **Executive Summary**

Engineering educator and R&D professional with **9+ years** experience spanning electronics hardware development, embedded systems, AI/ML, and full-stack software engineering. Currently pursuing **BS in Data Science from IIT Madras**. Distinguished by exceptional student mentorship enabling teams to secure **Rs. 45+ lakhs in innovation funding** (Shark Tank India, iHub Gujarat), resulting in **2 student patents**. Seeking AICTE Industry Fellowship to gain advanced industrial research experience and enhance diploma-level innovation ecosystem in Gujarat.

## **Professional Experience**

**Lecturer & Innovation Leader** 

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
- Deployed production Next.js Academic Management System at gppalanpur.in with enterprise-grade CI/CD

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**

**Bachelor of Science in Data Science and Applications** *Indian Institute of Technology Madras (IIT Madras)* 

**2021 – Present** Overall CGPA: 7.07/10

- Foundation: Completed (CGPA: 7.50) | Programming Track: Completed (CGPA: 7.19) | Data Science Track: In Progress (80/142 credits)

**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:** Next.js, React.js, Vue.js, Node.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, Proteus, Modbus

### **Key Projects & Achievements**

Smart Academic Portal | Next.js, Docker

2025

- Production system at gppalanpur.in with complete institutional management, student portfolios, and multilingual content

Personal Blog & Portfolio | Hugo

2024

- Self-hosted website at milav.in with comprehensive educational resources in English/Gujarati

System Threat Forecaster | Python, ML

2024

- Machine learning pipeline for cybersecurity threat prediction using advanced algorithms and pattern recognition

FPGA Image Steganography | FPGA, Verilog

2015

- Hardware implementation published in International Journal of Computer Applications

#### **Certifications & Recognition**

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

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

Coursera Specializations: Advanced Machine Learning, Deep Learning, Recommender Systems, Big Data, Data Mining

24+ NPTEL Course Completions with 15 Elite Performances across AI, Data Science, and Programming domains

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