Devesh Pramod Pawar
Indian Institute of Technology Madras

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EDUCATION

Program	Institution	%/CGPA	Year of Completion
B.Tech in Mechanical Engineering & Interdisciplinary M.Tech in Data Science	Indian Institute of Technology Madras, Chennai 600036, Tamil Nadu, India	[9.15/10](9.15/10)	2027*
Class XII (Maharashtra State Board)	R.C. Patel Art, Commerce & Science College, Shirpur 425405, Maharashtra, India	[98.17%](98.17%)	2021
Class X (Maharashtra State Board)	Janata High School, Sindkheda 425406, Maharashtra, India	[96.80%](96.80%)	2019

SCHOLASTIC ACHIEVEMENTS

- Secured **Silver Medal** at Inter-IIT Tech Meet'23 in the Albatross Energetics problem statement, competing among top IIT's.
- Achieved **AIR 4403** (Top 3%) in JEE Advanced 2022 and **AIR 5154** (Top 0.5%) in JEE Mains 2022, among 1M+ candidates.
- **Ranked 168** in MHT-CET 2022 out of 2.5 lakh+ candidates.
- Secured **District Rank 1** in Class X Board Examinations, achieving distinction as the highest performer in the entire district.

PROFESSIONAL EXPERIENCE

1. **Wipro Infrastructure Engineering** (Proof)
   (***Project***: *Packaging Cost Optimization for Spares.* **(May'25-July'25)**
   - Applied clustering & unsupervised learning to identify optimization opportunities, reducing packaging costs by **20%+**.
   - Built & deployed a **Python–Flask web app** with full ML-Pipeline & cost calculator, cutting **RFQ[1]** lead time by **~50%.**
   - Delivered a scalable solution adopted for multiple customer plants, improving **decision-making efficiency**.

2. **FedEx-IITM Centre** (Proof)
   (***Project***: *AI-based driver monitoring - Data Acquisition & Performance Studies.*) **(May'24-July'24)**
   - Designed pipeline for **real-time sensor data collection & integration** using 10+ haptic devices.
   - Applied ML classification models for anomaly detection, improving **training reliability & worker safety monitoring**.

PROJECTS

1. **Market Volatility Prediction using LSTM and TCN** (link) **(Personal Project)**
   - Developed forecasting models (**GARCH, LSTM, Transformer**) for financial time-series, achieving validation **MAE 0.42**.
   - Engineered features using **VMD[2]** and built a hybrid **VMD-LSTM-TCN model**, reducing MAE to **0.25 (40% improvement).**
   - Visualized model outputs to support **risk management & trading decision-making**.

2. **Custom Large Language Model** (link) **(Personal Project)**
   - Built and evaluated bigram and GPT-based model, demonstrating **deep learning architecture implementation**.
   - Built & evaluated a GPT-style model from scratch on a custom corpus, gaining **hands-on experience in transformers & NLP pipelines,** achieving **loss 5.21.**

3. **Reinforcement Learning Based Snake Game Playing Model** (link) **(Personal Project)**
   - Built a reinforcement learning agent with **Q-learning**, achieving adaptive gameplay in a custom Pygame environment.
   - Focused on designing, training, and optimizing **stochastic decision-making models** with dynamic state transitions.

POSITIONS OF RESPONSIBILITY

1. **Head & Project Member (iBot[3] Club, Center for Innovation, IIT Madras)** **(May'23-May'25)**
   - Led a **60+ member** robotics club, managing 5 projects and a competition team & initiated filing of **2 Intellectual Property** applications while mentoring students in robotics & AI.
   - Organized the "**AI-Robothon**" hackathon in collaboration with **Orangewood Labs**, & collaborated with O.P. Jindal Global University to develop a **GPT-powered semi-humanoid guide robot.**
   - Directed navigation module in Project **CoBALT[4]**, implementing A* & MPC algorithm and building ROS/Gazebo simulations to optimize warehouse logistics.

2. **Manager (Sponsorship & Industrial Relations, Center for Innovation, IIT Madras)** **(Oct'23-May'24)**
   - Secured and managed sponsorships for CFI[5] Research Conclave'23 (**1k+ footfall**) and Open House'23 (**5k+ footfall**).
   - Built a sponsor database, reached out to 15+ organizations, and negotiated in-kind deals to support CFI[5] projects.

RELEVANT COURSE WORK

- Foundations of Machine Learning*
- Introduction to Scientific Computing
- Principles of Economics
- Mathematical Foundations for Data Science*
- Data Structures and Algorithms (C++ & Python)
- Deep Learning

SKILLS

- Linux (Bash), Python, C++, Pandas, Numpy, PyTorch, TensorFlow, Git, SQL, MATLAB.
- MS Excel, MS PowerPoint, MS Word, Latex.
- Leadership, Team Work, Problem-Solving, Critical Thinking.

Abbreviations: ***ongoing** | **RFQ**[1]: Request for Quote | **VMD**[2]: Variational Mode Decomposition | **iBot**[3] : Robotics Club at IIT Madras | **CoBALT**[4]: Collaborative Bots for Automated Logistics & Transport | **CFI**[5]: Center for Innovation IIT Madras