Prince Patel

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EDUCATION:

Massachusetts Institute of Technology *Expected 2026*

BS, Computer Science, Artificial Intelligence, and Mathematics, GPA: 4.7, SAT Math: 800, SAT Reading: 740

- Relevant Coursework: Multi-Agent Learning (6.S890), Advanced Algorithms (6.1220), Computer Vision (6.8300), Statistics (18.650), Deep Learning (6.S898), Linear Algebra (18.06), Differential Equations (18.03)
- Organizations: South Asian Association of Students (Big Events Committee), Phi Kappa Theta (Risk Manager)

WORK EXPERIENCE:

Palantir *May 2024 - Sep. 2025*

Forward Deployed Engineer Intern

- Built and deployed an API (~12k daily uses) for predicting DRGs for active stays, beating previous accuracy by 300%
- Saved over 1,000 appeal writer hours at largest health system in US by developing data-backed AI tools
- *Skills: LLM applications, TypeScript, PySpark, client relations*

Stealth Robotics Startup *Sep. 2024 - May 2025*

Software Engineer

- Decreased CPU usage by 20% by replacing ROS2 with a custom IPC library written on ZeroMQ, preventing overheating on the 20,000+ devices shipped so far
- Built test infrastructure for tracking software to enable robust object tracking on a resource constrained device
- *Skills: system design, C++, ZeroMQ, ROS2*

Mind Company *May 2024 - Sep. 2024*

Founding Engineer, ML Research

- Surpassed SOTA models by up to 10% on benchmarks for various intention decoding from non-invasive EEG
- Developed a data collection web app for ~100 daily subjects, creating the largest labeled EEG dataset in 2 months

Mach Industries *Jan. 2024 - Feb. 2024*

Software Engineer Intern

- Enhanced range on an autonomous glider plane by 10x by developing a flight controller in C++ using PID loops
- Engineered a 10-fold increase in displacement measurement accuracy by fusing a CNN-powered optical flow calculator with IMU readings and applying an EKF, overall improving VTOL hovering stability
- *Skills: C++, PyTorch, object-oriented programming, TypeScript*

Epicore Biosystems *June 2023 – Sep. 2023*

Data Science Intern

- Improved accuracy of a hydration-tracking wearable to 95% by implementing a generalized linear model for forecasting sweat rate with accelerometer and temperature data inputs

Biomechatronic Group, MIT Media Lab *Mar. 2023 – Dec. 2023*

Undergraduate Researcher

- Predicting motor control of upper extremity amputees and translating to continuous prostheses control
- *Skills: PyTorch, pandas, numpy, computer vision, brain-computer interfaces*

Marine Robotics Lab, MIT CSAIL *Dec. 2022 – Apr. 2023*

Undergraduate Researcher

- Trained a locomotion policy for a quadruped robot in Isaac Gym using a PPO reinforcement learning program
- *Skills: PyTorch, C/C++, reinforcement learning, robotics, computer vision*

EXTRACURRICULAR EXPERIENCE:

MIT Class Council *Mar. 2023 – Present*

Vice President

- Expanding the impact of class-wide initiatives by collaborating with campus organizations to forge partnerships

MIT Capital Partners *Mar. 2023 – Present*

Sourcing Principal

- Demonstrated expertise in analyzing industry trends, competitive landscapes, and growth potential of startups

PROJECTS:

Multimodal Embeddings for High-Fidelity Image Compression *May 2024*

- Experimented with image segmentation and LLM captioning for encoding and a diffusion model for decoding

Denoising EMG Signals *Dec. 2023*

- Reduced noise in raw sEMG data by 300% by developing and training a denoising autoencoder model with self-attention in the encoder. Communicated findings via a scientific blog post.