

Pranav Arunandhi

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Education

Massachusetts Institute of Technology

Sep 2020 - May 2024

Bachelor's in Computer Science and Aerospace Engineering

- Relevant Coursework: Fundamentals of Programming, Introduction to Machine Learning, Design and Analysis of Algorithms, Introduction to Algorithms

Software and Programming Skills

Solidworks (Certified), Python, Java, SQL, R, MATLAB, C/C++, HTML, CSS, JavaScript, PHP

Software and Robotics Activities

Aerospace Controls Laboratory, MIT - Undergraduate Researcher

Sep 2020 - present

- Implementing autonomous driving policies in Python for a public Github repository to compare socially acceptable robot navigation algorithms

MIT Driverless - Controls Team Member

Oct 2020 - present

- Analyzing simulation data in MATLAB to develop and improve physical vehicle model for Roborace
- Developing PID controller for Indy Autonomous Challenge

FIRST Robotics Team 469 - Alumni Mentor, Former Co-Captain & Integration Lead

Sep 2016 - present

- Currently building UV-C disinfecting machine for first responders
- Modelled with CAD, assembled, and programmed in C++/Java/Python
- Dean's List Semi-Finalist; 2017 MI State Champions, Excellence in Engineering Award (x2), Innovation in Control Award

Civil Air Patrol, U.S. Air Force Auxiliary

Jul 2017 - present

Second Lieutenant, Executive Officer, Aerospace and Cyber Education Officer

- Teaching classes about aerospace, programming, and cybersecurity; Leading autonomous drone project for search and rescue (SAR) missions; Training cadets to qualify for SAR missions

EduTutors - Founder and Lead Tutor

Nov 2017 - present

- Created and launched a website for free tutoring
- Helped 50+ students through homework help, tutoring, STEM classes, and standardized test prep

Oakland University - Student Researcher

Jun 2018 - Aug 2019

- Conducted research on optimizing computer network structures; Presented at an international math conference in Florida (SEICCGC), and published in the Parallel Processing Letters (Vol. 29, Issue 2).

DASI Solutions - IT Intern

Jun - Aug 2019

- Developed and debugged the door access system for DASI Solutions using Visual Basic.

Zero Robotics Team Space Phoenix - Team Founder and Captain

Sep 2018 - Jan 2019

- Programmed a satellite to navigate through debris and hook onto and rescue another satellite; Analyzed data to optimize algorithm in collaboration with 2 teams in Romania
- Second Place in the Virtual Finals on ISS

Other Skills and Interests

Languages: English (native), Spanish (working proficiency), Tamil (native speaker)

Interests: Saxophone, Violin, Volleyball, Table Tennis, Bhangra and Bollywood Dance