

Samir Wadhwanja

Email: samirw@mit.edu | Cell: 210 - 548 - 9821 | Cumulative GPA: 4.5/5.0

I want to excel in the fields of robotics, controls engineering, and autonomous systems

EDUCATION

Massachusetts Institute of Technology

Class of 2018

B.S. Aerospace Engineering concentrating in Autonomous and Embedded Systems

EMPLOYMENT

Jet Propulsion Lab - Aerospace Engineering Extern (312D)

January 2017

- Served as Team Lead and Systems Engineer for Saturn Probe design project
- Spent one month with TeamX to test web-based Integrated Modeling Environment (IME).
- Designed a simplified Saturn probe within IME to perform trade studies and demonstrate effectiveness of IME in mission formulation and spacecraft design.

The Boeing Company - SLS Electrical Design Engineering Intern

Summer 2016

- Created flexible vehicle model incorporating FEA models and electromechanical actuators
- Designed actuator control system for thrust vector control of the Upper Exploration Stage
- Awarded a Pride@Boeing Award – creating internal design tools for flex model creation

Northrop Grumman - Software QA Engineering Intern

Summer 2015

- Performed software source code and test procedure reviews on Triton UAS
- Identified opportunities for improvement, created initiatives and provided solutions to save on schedule and budget within Systems Engineering department
- Awarded a Performance Recognition Award – created VB and DXL scripts to automate batch importation and linking of test cases into DOORS database

PROJECTS

Solar Powered Water Pump @ DLAB - Undergraduate Research Assistant

Spring 2016

- Developed a solar powered water pump system for remote villages without access to running water or electricity - traveled to El Salvador in summer 2016 to test and implement

Integrated Robotics Group @ CSAIL - Undergraduate Research Assistant

Fall 2015

- Tackled gesture/speech recognition utilizing machine learning algorithms to determine and communicate decision recommendations for labor floor delivery nurses

EXTRACURRICULARS/LEADERSHIP

Questbridge Exec - Outreach Liaison

Fall 2016 - Present

- Organizes weekly tutoring meetups for local middle schoolers with Breakthrough Boston

DLAB Youth - Board Member

Fall 2016 - Present

- Manages DLAB's local outreach program to bring workshops to local schools

MIT Rocket Team - Avionics Subteam Captain

Fall 2015 - Spring 2016

- Led avionics subteam in developing sensor and telemetry system, designing custom circuit boards, and maintaining constant communication with rocket

SKILLS/CLASSES

Proficient: Python, MATLAB, SIMULINK, Arduino, Office, REST APIs

Familiar: C++, Numberjack, DXL, HTML, CSS, Javascript, Photoshop

Relevant Courses Taken (through Spring 2017):

6.002 — Circuits and Electronics

6.006 — Introduction to Algorithms

6.320 — Feedback System Design (G)

16.07 — Aerospace Dynamics

16.001,2,3,4 — Unified Engineering

(Fluids, Thermo, Structures, Signals)

16.405 — Robotics: Science and Systems Lab

16.413 — Autonomy and Decision Making (G)