

Samir Wadhwan

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, Electrical Engineering and Computer Science

EMPLOYMENT

The Boeing Company - SLS Electrical Design Engineering Intern

Summer 2016

- EAH Intern (~10% interns) - Part of the Engineering Accelerated Hiring Initiative, selected in early September and matched with SLS Program in Huntsville, AL
- 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 – going above and beyond the expectation for flexible vehicle project, and submitting a paper to IEEE AeroConf on work performed

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

RMPL Planner and PMT Solver @ CSAIL - SuperUROP

Fall 2016 - Present

- Working in Model-based Embedded and Robotic Systems (MERS) lab to design geometric reasoning solvers to be implemented in a model-based planner for decision making

Solar Powered Water Pump @ DLAB - UROP

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 - UROP

Fall 2015

- Tackled gesture/speech recognition to determine and communicate decision recommendations utilizing machine learning algorithms

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: MATLAB, SIMULINK, Python, LISP, RMPL, Arduino, Office, Sublime, REST APIs

Familiar: C++, iOS Development, XCode, DXL, HTML, CSS, Javascript, Photoshop

Relevant Courses Taken/Planned (through Spring 2017):

6.002 — Circuits and Electronics

6.006 — Introduction to Algorithms

6.036 — Machine Learning

6.302 — Feedback System Design

6.866 — Machine Vision

16.001,2,3,4 — Unified Engineering
(Fluids, Thermo, Structures, Signals)

16.07 — Aerospace Dynamics

16.405 — Robotics: Science and Systems Lab

16.413 — Autonomy and Decision Making