

## EDUCATION

**Massachusetts Institute of Technology**

*Class of 2018*

*Candidate for Bachelor of Science in Mechanical Engineering (Course 2)*

**Select Coursework:** Product Engineering Process \*, Design and Manufacturing I & II, Robotics\*, Engineering Leadership Lab\*, Dynamics, Mechanics and Materials, Thermal-Fluids, Measurement and Instrumentation, Applied Electronics, Mechanical Engineering Tools, Numerical Computation, Differential Equations, Japanese IV

*\* Enrolled Fall 2017*

## EXPERIENCE

### **Aperia Technologies**

*Product Management Intern*

*Summer 2017*

- ❑ Development of mobile cart for testing and prototyping through pneumatic, electrical, and mechanical systems design and integration
- ❑ Requirements gathering and systematic prioritization of product features for the second generation automatic tire inflator system at a rapidly growing startup;

### **Vecna**

*Robotics Mechanical Intern*

*January 2017*

- ❑ Proved concept and validated cycle lifespan through full implementation of a test rig for a novel hydraulic actuator in a DARPA funded robot arm project;
- ❑ Repaired and validated performance through cycle testing of a lifting robot

### **Draper**

*Autonomous Vehicle Intern*

*Summer 2016*

- ❑ Designed and implemented all chassis structure and assembly for a novel autonomous mobility scooter as a scalable test vehicle;
- ❑ Designed for manufacturing and created technical drawings of over a dozen mounts and parts that were professionally machined and 3D printed;
- ❑ Researched path planning algorithms to improve efficiency and safety

### **MIT Newman Lab**

*Undergraduate Researcher*

*Summer 2015*

- ❑ Developed and improved experimental functionality of real time plotting, calibration, and active stiffness and damping adjustment in a single GUI for a wearable physical therapy device

## LEADERSHIP & ACTIVITIES

### **MIT Phi Kappa Theta**

*Chapter President*

*(Ex- VP, Treasurer)*

- ❑ Spearheading chapter growth and management of an independent organization, including defining the vision and goals, driving progress as chief of staff, leading team-building and inspiring members, meeting facilitation, conflict resolution, house maintenance, and finances of an over \$300,000 per year budget

### **MIT Gordon Engineering Leadership (GEL) Program**

- ❑ One of the top third applicants of 350+ MIT students accepted for professional coursework in engineering leadership theory learned through team simulations

### **MakeMIT (TechX)**

*Organizer*

- ❑ Coordinated corporate sponsors, tools and materials, and mentors for MIT's premiere hardware and prototyping hackathon hosting 250+ college students

### **MIT Chinese Students Club**

*Member Outreach Chair*

- ❑ Spearheading efforts to foster a welcoming environment and engage new and returning members

### **FIRST Robotics Team 6112**

*Team Lead*

- ❑ Achieved first place in state and led engineering design, documentation, business plan creation, and outreach efforts for a competitive robotics team;

## TECHNICAL SKILLS

**Computer Aided Drafting & Manufacturing** | Solidworks, MasterCAM

**Manufacturing** | CNC Machining, Injection Molding, 3D Printing, Laser Cutting, Conventional Machining

**Programming** | MATLAB, Python, HTML & CSS, Ladder Logic

**Electronics** | Power Systems, Breadboarding, Measurement, Arduino

**Organizational** | Microsoft Office, Salesforce