
EDUCATION

Massachusetts Institute of Technology

Class of 2018

Candidate for B.S. in Mechanical Engineering

Select Coursework: Design and Manufacturing I & II, Dynamics and Control I & II, Mechanics and Materials I & II, Thermal-Fluids I, Measurement and Instrumentation, Mechanical Engineering Tools, Numerical Computation, Differential Equations, Japanese IV

EXPERIENCE

Vecna

Robotics Mechanical Intern

January 2017

- ❑ Design for manufacturing and assembly to reduce costs for an electric vehicle consumer product
- ❑ Developing manufacturing procedures to improve quality and marketability

Draper

Autonomous Vehicle Intern

Summer 2016

- ❑ Designed and implemented all chassis and electronics packaging 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 Distributed Robotics Lab

Undergraduate Researcher

Fall 2015

- ❑ Designed and prototyped an adaptive control module to improve capability of printed hydraulic systems;
- ❑ Designed motor mount for printed hydraulic hexapod robot

MIT Newman Lab

Undergraduate Researcher

Summer 2015

- ❑ Developed GUI with real time plotting, calibration, and active stiffness and damping adjustment to improve experimental data logging capabilities for a wearable physical therapy device
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LEADERSHIP & ACTIVITIES

Phi Kappa Theta - Mass Eta

Chapter President

Spring 2016 – Current

- ❑ Spearheading chapter activities of summer tenancy, community involvement, conflict resolution, member accountability, house maintenance, and finances of an over \$300,000 per year budget

MakeMIT (TechX)

Organizer

Fall 2015 – Spring 2016

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

MIT Chinese Students Club

Member Outreach Chair

Spring 2016 – Current

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

FIRST Robotics Team 6112

Team Lead

Fall 2012 – Spring 2014

- ❑ Led mechanical design, engineering notebook documentation, business plan creation, sponsor relations, and outreach efforts for a competitive robotics team;
 - ❑ Designed and manufactured end gripper and grappling hook winch system
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TECHNICAL SKILLS

Computer Aided Drafting & Manufacturing | Solidworks, MasterCAM

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

Programming | MATLAB, Python, HTML & CSS, Tcl

Organizational | Microsoft Office & Visio