
EDUCATION

Massachusetts Institute of Technology

Class of 2018

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

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

EXPERIENCE

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| Vecna
<i>Robotics Mechanical Intern</i>
<i>January 2017</i> | <ul style="list-style-type: none">❑ Proved concept and validated cycle lifespan through full implementation of a test rig for a novel hydraulic actuator for use in a DARPA funded robot arm project❑ Repaired and validated performance through cycle testing of a lifting robot |
| Draper
<i>Autonomous Vehicle Intern</i>
<i>Summer 2016</i> | <ul style="list-style-type: none">❑ 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
<i>Undergraduate Researcher</i>
<i>Summer 2015</i> | <ul style="list-style-type: none">❑ 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 |
| Robotech Center
<i>Program Instructor</i>
<i>Summer 2015</i> | <ul style="list-style-type: none">❑ Taught STEM concepts to elementary school students through assembly and programming of an Arduino self driving toy car |
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LEADERSHIP & ACTIVITIES

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| Phi Kappa Theta - Mass Eta
<i>Chapter President</i>
<i>(Ex- VP, Treasurer)</i>
<i>Spring 2015 – Current</i> | <ul style="list-style-type: none">❑ Spearheading chapter management of an independent organization, including defining the vision and goals, working with administrators as well as executive board teammates, summer tenancy, conflict resolution, member accountability, house maintenance, and finances of an over \$300,000 per year budget |
| MakeMIT (TechX)
<i>Organizer</i>
<i>Fall 2015 – Spring 2016</i> | <ul style="list-style-type: none">❑ Coordination of corporate sponsors, tools and materials, and mentors for MIT's hardware and prototyping hackathon hosting 250+ college students |
| MIT Chinese Students Club
<i>Member Outreach Chair</i>
<i>Spring 2016 – Spring 2017</i> | <ul style="list-style-type: none">❑ Spearheading efforts to foster a welcoming environment and engage new and returning members |
| FIRST Robotics Team 6112
<i>Team Lead</i>
<i>Fall 2012 – Spring 2014</i> | <ul style="list-style-type: none">❑ 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, Ladder Logic

Electronics | Breadboarding, Soldering, Measurement

Organizational | Microsoft Office & Visio, Asana, Confluence