KEVIN PALISOC

kpalisoc@mit.edu
(907)726-7144
kevinpalisoc.com

EDUCATION

Massachusetts Institute of Technology ***Class of 2018***
Candidate for Bachelor of Science in Mechanical Engineering (Course 2)

Select Coursework: Product Engineering, Design and Manufacturing, Robotics, Engineering Leadership, Mechanics, Dynamics, Thermal-Fluids, Measurement and Instrumentation, Applied Electronics, Numerical Computation, Japanese 4

PROJECTS

Coordinate
(Search and Rescue)
Product Design

- ❑ Delivered alpha prototype of 10 total devices (3 unique designs) within 6 weeks, after 3 rapid iterations of mechanical enclosures, as a leading designer in a team of 18 students;
- ❑ Drove electronics integration: delivered novel surface rechargeable battery pack and compartment that accepts both AAs or this pack, designed tablet mounting and button interfaces;
- ❑ Owned waterproofing design, IP67 pending, through custom gaskets and liquid adhesives;
- ❑ Created toolpaths for CNC milling using HSMWorks and supported rubber molding processes;
- ❑ Presented on behalf of the team at the class product launch to over 250,000 unique viewers and 1100 live

Assistive Robot Arm
Mechanical Design

- ❑ Delivered serial elastic actuated robot to safely help hemiplegic patients with household tasks
- ❑ Owned design of arm linkage subsystem: lightweight structure, low friction joints, and belt power transmission

INDUSTRY EXPERIENCE

Aperia Technologies
Product Management Intern
Summer 2017

- ❑ Owned pneumatic, electrical, and mechanical systems design of a mobile testing and prototyping bench with an uninterruptible 1 hour battery life and air storage;
- ❑ Integrated pressure regulators, pneumatic sensors, UPS and battery, AC to DC power, drawers;
- ❑ Supported PRD creation for the second gen automatic tire inflator system at a rapidly growing startup;

Vecna
Robotics Mechanical Intern
January 2017

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

Draper
Autonomous Vehicle Intern
Summer 2016

- ❑ Owned chassis structure design and assembly for a novel autonomous mobility scooter;
- ❑ Designed for manufacturing and created technical drawings of over a dozen mounts and parts;
- ❑ Researched path planning algorithms to improve efficiency and safety

LEADERSHIP & ACTIVITIES

MIT Phi Kappa Theta ***Chapter President (Ex- VP, Treasurer)*** Spearheading chapter growth: defining the vision and goals, driving as chief of staff, meeting facilitation, conflict resolution, vendor management, and finances of a $300,000 per year budget

MIT (GEL) Program Learning engineering industry leadership theory through team simulations and class instruction

MakeMIT (TechX) ***Organizer*** Coordinated MIT's premiere hardware and prototyping hackathon hosting 250+ college students

FIRST Robotics 6112 ***Team Lead*** Achieved first in state and led engineering and business efforts for a competitive robotics team;

TECHNICAL SKILLS

CAD & CAM | Solidworks, HSMWorks, MasterCAM, Tooling Design, Rendering

Manufacturing | CNC & Conventional Machining, Injection Molding, Rubber Molding, 3D Printing

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

Electronics | Rapid Prototyping, Signal Processing and Measurement, Arduino

Other | Japanese, Microsoft Office, Salesforce