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OBJECTIVE: To obtain an internship for the Summer of 2019.

EDUCATION: **Worcester Polytechnic Institute (WPI),** Worcester, MA
Bachelor of Science in Mechanical and Robotics Engineering, GPA 3.4
Relevant Coursework – Intro to Robotics Engineering, Intro to Program Design, Object Oriented Programing, Intro to Static Systems, Unified Robotics I, Unified Robotics II , Stress Analysis, Fluid Mechanics, Dynamics, Digital Circuits, Unified Robotics III, ME 2300.
Future Coursework – Industrial Robotics, ID 2050,c Engineering Experimentation.

SKILLS : **Programming Languages:** Python, C++, C, Java, MATLAB, HTML, PHP, Racket.
Computer Skills: Microsoft Office, SolidWorks, Maple, Norton Linkages, MathCAD, Eclipse, Linux, Git, Command Prompt (Windows and Linux), MATLAB, Visual Studio.

EXPEREINCE: **Tutor, State Resource Center,** May- August 2017.
Volunteered for the state resource center to teach underprivileged kids elementary level Math and English. Handled conflict between the children and drafted exams for the school resulting in 99% of class pass in the national exam.

Embedded Systems Intern, Pure Logic Labs, May- August 2018.

Worked as an embedded system engineer to prototype new sensors and hardware for the company. Tested the sensors before distribution. Wrote firmware for sensors. Presented and marketed company's technology to get more funding. Helped with the company's front end website design using PHP, JavaScript.

PROJECTS: **Unified Robotics III,** January – March 2018
- Worked on a team of three to write a MATLAB and C++ script for the RBE 3001 Industrial Arm to sort objects according to their color and size.
- Used Computer Vision in MATLAB to sort the objects based on their color and size with the given camera.
- Used the Denavit-Hartenberg convention to write a script for the forward kinematics of the arm.
- Calculated the Jacobian and path planned using a quantic polynomial to sort the objects.
- Learned Git and its various commands in the command line and Git Bash for Windows.
- Wrote a script in MATLAB to dynamically track the objects to earn points for the extra credit part of the project

Unified Robotics II, October – December 2018
- Collaborated with a team of four to build a robot capable of navigating a maze to find a fire in a maze, blow out the found fire and report its location with accuracy.
- Placed Sensors and connected them into the microprocessor, making sure the I2C and SPI buses did not coincide within themselves.
- Developed parts for the prototype using 3D printing and laser cutting available at the Foisie Innovation Studio, slicing it using 3dprinterOS.
- Strength tested the printed materials (PLA) and included the stress calculation in the report
- Prototyped, and wired the robot using the makerspace tools like drills, exactor

knifes, dremels, hot glue, sand paper.
- Programmed the robot using complex algorithms in C++.

Unified Robotics I, August – October 2018
- Collaborated with a team of four people to build a robot capable of lifting an aluminum plate weighing 2.3 lbs and placing it at 45 and 25 degrees.
- Calculated the gear train and forces on the four bar to successfully complete the challenge.
- Developed parts for the prototype using 3D printing and laser cutting available at the Foisie Innovation Studio, slicing it using 3dprinterOS.
- Strength tested the printed materials (PLA) and included the stress calculation in the report
- Designed, prototyped, and wired the robot using the makerspace tools like drills, exactor knifes, dremels, hot glue, clamps, soldering kits.
- Toleranced all the 3D printed parts for the final assembly using makerspace tools like exactor knifers, sand paper
- Coded the robot in complex C++ algorithms.

I**ntro to Engineering Design**, January – March 2018
- Designed and Prototyped an Exoskeleton for people with muscle atrophy in the legs with a system of 3D Printed frames and pulleys.
- Worked with a team of three people with different roles as Project Manager, Sales and Marketing Engineer and Design Engineer.
- Applied for the role of Design Engineer and Designed the model in SolidWorks.
- Sliced the STL files using 3DPrinterOS and oriented the designs in a way to make sure the complex geometrical parts did not fail.
- Analyzed the parts using design study in SolidWorks and gave a professional report for the next iterations and the final product of the design

Intro to Robotics Engineering, March – May 2018
- Worked on a team of three people to build a robot capable of collecting ping pong and tennis balls and placing them into 18/12/6 inch high towers.
- Designed the robot with the necessary four bar and drivetrain calculations.
- Coded the robot in C, C++ using Arduino IDE.

Great Problem Seminar, Aug – Dec 2017
- Worked in an interdisciplinary team of four people and provided a solution for the problem of freshman malnutrition at WPI.
- Created posters to inform students in the Dining Hall about the various consequences of eating unhealthily. Researched information on how to eat properly and implemented information into WPI's Dining Hall.
- Awarded first position for the project in class and was invited to judge next year's GPS.

ACTIVITIES: **Student Government Association (SGA), Senator,** December 2018 – Present
Cue Ball Club, Member, August 2017 – Present
Great Problem Seminar, Judge, December 2018

AWARDS : **Great Problem Seminar, First Place,** December 2017
AP Scholar with Honor, College Board, July 2016
WPI Deans List, Fall 2017