Shmuel Weinfeld

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EDUCATION

Florida International University (FIU) GRADUATION: MAY 2020
Bachelor of Science Electrical Engineering – Cum Laude GPA: 3.56
Organizations: Upsilon Pi Epsilon, Hillel FIU

SKILLS AND COURSES

Skills: C/C++, Java, Python, Data Structures & Algorithms, and Object-Oriented Programming
Relevant Courses: Digital Logic Design, Digital Signal Processing, C for Embedded Systems, Autonomous Systems, Applied Machine Learning, Data Analytics, Economics, and Public Speaking

PROJECTS

SENIOR DESIGN CAPSTONE AUGUST 2019 - APRIL 2020
SOFTWARE ENGINEER

- Collaborated with four fellow seniors and a mentor to develop a smart bandage system
- Programmed a microcontroller using **C++** to control multiple sensors and share data via I2C
- Explored and analyzed all sensor data using **Microsoft Excel**
- Researched optimal designs that complied with all electronic hardware specifications
- Wrote design proposals and presented monthly design updates to fellow senior students

CREDIT APPROVAL PREDICTION FEBRUARY 2020
MACHINE LEARNING ENGINEER

- Investigated the UCI Credit Approval data set and created a model to predict credit approval
- Used Python's **numpy**, **pandas**, and **matplotlib** to clean the data and to create visualizations
- Implemented and compared the accuracy of **logistic regression**, **SVM**, and **random forests**
- Achieved a 90% accuracy score using the random forests algorithm

UPSILON PI EPSILON ROBOTICS TEAM SEPTEMBER 2019 - DECEMBER 2019
SOFTWARE/ELECTRONICS ENGINEER

- Worked with a 20 - person student team to develop an autonomous robot
- Utilized an **Arduino** micro-controller to control motors, sensors, and robotic movement
- Met with team members twice a week to assist in circuit design and Arduino programming

LOW COST INCUBATOR NOVEMBER 2018 – DECEMBER 2018
SOFTWARE/ELECTRONICS ENGINEER

- Assisted in the design of a low-cost incubator as member of a 5-person team
- Designed a prototype with temperature sensors, a fan, a heating pad, and an Arduino
- Worked on the circuit design and **MATLAB** code to trigger the fan if a specified threshold temperature was reached

EXPERIENCE

FIU STUDENT ATHLETE ACADEMIC CENTER (SAAC) SEPT. 2019 - DEC. 2019
STUDENT PEER TUTOR

- Facilitated the development of self-sufficient student-athletes and enabled them to become academic champions
- Tutored students in a variety of courses including calculus, physics, and statistics
- Discussed learning, test-taking, and study strategies and assisted with assignments and questions
- Attended and participated in SAAC meetings and training sessions