# Shmuel Weinfeld

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## **EDUCATION**

Florida International University (FIU)

Bachelor of Science Electrical Engineering

Organizations: Upsilon Pi Epsilon, Hillel FIU

Technologies: Knowledge of C/C++, Java, and Python

Relevant Courses: Data Structures, Object Oriented Programming, Digital Signal Processing, Data

Analytics, Public Speaking, Macroeconomics, Business Decisions

#### **EXPERIENCE**

# FIU STUDENT ATHLETE ACADEMIC CENTER (SAAC)

SEPT. 2019 - DEC. 2019

**GRADUATION: MAY 2020** 

GPA: 3.56

# STUDENT 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

#### **PROJECTS**

**SENIOR DESIGN** 

AUGUST 2019 - APRIL 2020

#### EMBEDDED 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
- 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

## DATA ANALYST

- 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**

SEPT. 2019 - DEC. 2019

- 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** 

- 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

#### ELECTROMYOGRAPHY PROSTHETIC

OCTOBER 2018

- Worked with 4 teammates to develop a 3D-printed prosthetic hand
- Programmed an Arduino Uno using MATLAB to translate electromyography signals to movement in the 3D-printed hand