Ezra K. Savitz

10 Harrington St, Newton, 02460 MA (857)-231-1656 | esavitz@umass.edu

Summary

Driven and well-rounded biomedical engineering and computer science student with demonstrated communication and teamwork skills and a strong academic track record. Has experience with object-oriented programming, MATLAB, CAD, and chemistry labs. Interested in product and software development, project management, human machine interface, and medical devices.

Education

University of Massachusetts Amherst

Anticipated May 2023

Bachelor of Science in Biomedical Engineering and Computer Science, GPA: 4.0

Dean's List

Coursework

Bioengineering, Biomechanics, Intro to Biomedical Engineering, Java Programming, C programming, Introduction to Computation, Data Structures and Algorithms, Statics and Dynamics, Strength of Materials, Materials Science, Anatomy and Physiology, Calculus I, II, III, IV, General Chemistry I & II (Lab), General Physics I

Academic Projects

Bone Cast Improvement

- Worked in a team of 5 to improve upon bone cast design for wrist fractures
- Designed prototype of 3D printed arm cast using CAD (Fusion 360)
- Wrote a technical report on the history of bone casting technology and how 3D printed bone casts with custom fitting would lessen complications due to localized pressure common in fiberglass casts
- Presented research and design using PowerPoint to professor and class

Programming and Computer Modeling

- Used MATLAB to analyze, model, and graph sample data
- Implemented a text analyzer using Java to find most common words, word count, and line count
- Created Java code to perform RLE image compression and decompression

Data Structures and Algorithms (Java)

- Wrote a Merge Sort algorithm for a filestream
- Implemented Stack and Queue functionality using Linked Lists
- Built a Postfix expression evaluator using Stacks

Work Experience

TechSimple, Co-founder, Newton MA

April 2016 - July 2019

- Created company to help seniors in the Greater Boston area by providing tech support
- Helped with technology problems including fixing broken printers to setting up new mobile devices
- Crafted website and marketing materials for company

COOK, server, Newton MA

April 2019 - August 2019

- Worked in a team to provide friendly, fast, and accurate service
- Anticipated and addressed guests' service needs

Skills

CAD, Java, Python, C, MATLAB, Microsoft Office Suite,

Proficient with Windows, MacOS, and Linux systems

Chemistry lab skills include: titration, balances, vacuum filtration, TLC, thermal/kinetic analysis

Activities & Affiliations

Biomedical Engineering Society (BMES)

Guitar, chess, travel, reading, skiing, skateboarding, basketball, hiking, art