



ZACHARY BAUER

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AVAILABILITY

Available July – December 2018 for a full time internship/co-op

EDUCATION

Northeastern University

Boston, MA

Third Year Candidate for Bachelor of Science in Bioengineering, Minor in Computer Science

May 2020

Relevant Courses: Bioelectricity; Biomolecular Dynamics and Control; Organic Chemistry 1; Biomechanics; Quantitative Physiology; Fundamentals of Computer Science 1&2; Bioengineering Experimentation and Statistics; Math Methods for Engineers; Engineering Problem Solving and Computation; Engineering Design

GPA: 3.47/4.0

Honors/Awards: Dean's List, Honors Program

Activities: Acting Out (Theater Club), Jumpstart (Preschool Classroom Volunteering), Northeastern Association for Computing Machinery, BioMedical Engineering Society, Choral Society, NU Sound (Acoustical Engineering)

TECHNICAL SKILLS

Proficient Programming Languages: Java (Swing), Python (Flask), Matlab, HTML/CSS/Javascript (D3), Git

Familiar Programming Languages: PHP, C++/C#, Arduino, Javascript (jQuery, Node, Angular)

Applications: AutoCAD, SolidWorks, Mimics, Unity, Microsoft Office

PROFESSIONAL WORK EXPERIENCE

First Light Biosciences

Bedford, MA

Full Time Software Engineer Co-op

July 2017 - December 2017

- Developed a Java program to operate a medical device for the rapid detection of hospital borne infections as part of an AGILE team with a continuous integration environment
- Maintained in-house imaging applications in Java swing by addressing bug reports and feature requests
- Created a python test program to assist in integration and testing of new hardware
- Implemented functionality for encoding and interpreting 2d barcodes to include more data than 1d barcodes allow to better track manufacturing information about the cartridge

RESEARCH

Interdisciplinary Affective Sciences Laboratory, Northeastern University

Boston, MA

Research Assistant

May 2016 – May 2017

- Analyzed personality traits as a predictor of prosocial behavior using feature selection and clustering
- Developed a project website and data visualizations (D3) of user demographic information
- Implemented and developed experimental protocols in study with over 300 participants
- Collected physiological and experience sampling data from participants over two months

HACKATHON EXPERIENCE

Gotta Go Real Fast, HuskyHacks (2016): Unity racing game using a recorder as a controller (Winner - Best Design)

Segway Bot, HuskyHacks (2016): Autonomous, self-balancing Segway robot (Winner - First Hack)

EduSmart, PennApps (2016): Tutoring web app that uses facial recognition to determine student progress

Daily Briefing, McHacks (2017): Prints news articles, a daily joke, the weather, and custom reminders every morning

OTHER SKILLS AND INTERESTS

Interests: Music composition, film production, web development, euphonium, running, tycoon games, theater

Languages: Basic German and French

Travel: 33 US states, Canada, Aruba