NANCY ZHENG

nancyzhe@bu.edu 516-301-6613 nancy-zheng.com github.com/nancyzhe

EDUCATION

Boston University **Expected May 2022**
B.S. in Computer Engineering
Cumulative GPA: 3.47/4.00 | College of Engineering Dean's List
Coursework: Applied Algorithms & Data Structures, Eng. Design, Machine Learning, Software Design, Computer Networking

SKILLS

Programming: C, C++, Verilog | Familiar in Python, C#
Platforms/Tools: Git, GitHub, Postman, Jenkins, CLion, Visual Studio, Vivado

EXPERIENCE

Zwift | Software Engineer Intern — Remote **Jun 2021 - Aug 2021**
- Created and tested a new endpoint for Zwift's partner, Today's Plan, to check if an account exists using Java and Postman
- Implemented a "Build with Parameters" feature using Jenkins to allow the developer to select a deployment environment
- Analyzed Zwift's business structure to provide a solution towards increasing engagement with the younger audience

Technology Innovation Scholars Program | Inspiration Ambassador — Boston, MA **Sep 2020 - Present**
- Collaborated with 60 ambassadors in virtual activities to encourage 50+ K-12 students to pursue a career in engineering
- Developed new educational activities and challenges with faculty to increase engagement among K-12 students

Visual Information Processing Lab | Research Assistant — Boston, MA **Feb 2020 - May 2021**
- Created testing sets by drawing bounding boxes around people frame-by-frame for each 500-1000 frame dataset critical for the lab's development of object detection from fisheye images and videos
- Analyzed the design and versatility of the labeling interface to increase organizational efficiency

Girls Who Code BU | Director of Communications — Boston, MA **Nov 2019 - May 2021**
- Organized networking opportunities, career development events, and coding workshops (Python, Java, C++, etc.) that resulted in an increase of around 40 new member sign-ups and event attendees
- Created web content and maintained all forms of social media to ensure a cohesive branding of the GWC BU chapter

PROJECTS

Opticle **Sep 2021 - Present**
- Designed and developed a supplementary wearable device for the blind to detect objects in a 3D space using YOLOv4
- Implemented auditory feedback and a haptic feedback system to allow users to gain information on the detected object
- Tested a fully-functional prototype with a user from The Carroll Center for the Blind in Boston for appropriate feedback

Food Scanner App **Sep 2021**
- Programmed a mobile app designed with React Native that allows users to scan food items and check nutritional data
- Implemented a complete sign-in, sign-up, and log-out functionality and utilized the FDA API to retrieve food information

Standoff Game in Verilog **Nov 2020 - Dec 2020**
- Programmed a functioning game similar to Rock, Paper, Scissors on the FPGA for individuals to play against the CPU
- Generated simulation waveforms for all game functions to debug and ensure components work accurately

Chess Software Application **Apr 2020 - May 2020**
- Programmed a functioning, user-friendly Chess Android application in a team of 4 using Android Studio with the purpose of providing users with a portable and simple two-player game
- Conducted in-depth research to implement chess rules, combinations, and strategies to ensure optimal user experience

Pest Infestation Trap **Jan 2020 - May 2020**
- Researched and designed a fully functional, humane, and cost-effective pest infestation trap to efficiently capture pests
- Fulfilled all the main objectives which include capturing multiple pests without contact before release, preventing harm to the pests, maintaining sufficient battery life, and easy location tracking all within the $400 budget