# **Robert Chatterton**

Boston, Massachusetts | Southport, Maine 408-992-1174 | <u>chatterton.r@northeastern.edu</u> | <u>website</u>

### **EDUCATION**

Northeastern University Khoury College of Computer Sciences, Boston, MA

Expected May 2023

Bachelor of Science in Computer Science, GPA 3.15

- Coursework: Natural Language Processing, Object-Oriented Design, Computer Systems, Algorithms,

Fund. of Cybersecurity, Embedded Design, Fund. of Computer Science II, Discrete Structures,

Differential Equations, Linear Algebra, Calculus II

The King's Academy High School, Sunnyvale, CA, GPA 4.15 / 4.0

June 2018

- Coursework: AP Computer Science Principles (5), AP Statistics (4), AP Calculus BC (4), AutoCAD

- Activities: Varsity Football Team Captain, NHS, California Scholarship Federation

## TECHNICAL PROJECTS

**Animation Program** 

June 2020

- Programmed an application in Java that displays, describes, and edits animations utilizing the model/view/controller design pattern

- Reads in a formatted animation text file, can export to a descriptive text file or an SVG animation
- Editor includes playback controls as well as keyframe editing capabilities

## **Simple Sequential Processor**

April 2020

- Designed an 8-bit binary sequential processor in Simulink with addition, subtraction, multiplication, bitwise "AND", and register capabilities

Minesweeper April 2020

- Recreated the popular game "Minesweeper" in Java

#### **MNIST Database Image Classification**

November 2019

- Designed an image processing program using Racket
- Utilized a K-Nearest Neighbors algorithm to determine the digit in a given testing image, training the program with the MNIST database of handwritten digits

# **Autonomous Light Sensing Robot**

April 2019

- Engineered an autonomous robot using an Arduino Uno programmed with C++
- Integrated ultrasonic distance sensors and photoresistors to travel to the light source in a dark room

#### EXPERIENCE

## **Coastal Maine Botanical Gardens**

Summers, 2018-2020

Horticultural Intern

- Aided in the landscaping and design of new garden expansions
- Demonstrated guest service and collaborative teamwork skills
- Recognized by the department head for diligence and eagerness to tackle many of the more demanding tasks

#### SKILLS

Programming: Java, C++, Python 3, Processing, HTML 5, CSS 3, MATLAB, Racket

Software: Linux/Unix, Vim, AutoCAD, Solidworks, Simulink, MATLAB, Adobe After Effects, Photoshop,

Illustrator, GIMP, Unity, LaTeX, Linux/Unix, Windows 10, Mac OS

Electronics: ZedBoard, Arduino