# **Robert Chatterton**

Locally in Boston, Massachusetts | Permanently in Southport, Maine | Available from January – August 2021 408-992-1174 | chatterton.r@northeastern.edu | robertchatterton.me

#### **EDUCATION**

## Northeastern University, Boston, MA Khoury College of Computer Sciences

Sept. 2018 – Present Expected May 2023

Bachelor of Science in Computer Science, GPA 3.15 / 4.0

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

Fundamentals of Cybersecurity, Embedded Design, Fundamentals 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:** Advanced Placement (AP) Computer Science Principles, AP Statistics, AP Calculus BC Varsity Football Team Captain, National Honor Society, California Scholarship Federation

#### TECHNICAL SKILLS

**Proficient**: Java, C++, Python 3

Familiar: C, SQL, HTML 5, CSS3, Assembly, Markdown, JavaScript

**Software**: Git/Github, Linux/Unix, Vim, AutoCAD, Solidworks, Simulink, MATLAB, Adobe Photoshop,

After Effects, Illustrator, GIMP, Processing, Unity, Jekyll, LaTeX, Windows 10

#### TECHNICAL PROJECTS

## **Animation Program** (Java)

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** (Simulink)

April 2020

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

### **Minesweeper** (Java)

April 2020

- Recreated the popular game "Minesweeper" in Java

#### **MNIST Database Image Classification** (Racket)

November 2019

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

# **Autonomous Light Sensing Robot** (C++, Arduino)

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

**Horticultural Intern**, Coastal Maine Botanical Gardens – Boothbay Harbor, Maine Summer 2018 – 2020

- Landscaped and designed new garden expansions and collaborated with team to handle larger projects
- Supported customers by providing directions and answering their inquiries
- Recognized by the department head for diligence and eagerness to tackle many of the more demanding tasks

#### Interests