# **Katherine Zeng**

(781) 434-8675 | <u>zeng.ka@northeastern.edu</u> | Boston, MA 02115 linkedin.com/in/k-zeng | github.com/kzeng24 | kzeng24.github.io/PersonalWebsite Availability: May – December 2022

### **EDUCATION**

Northeastern University, Boston, MA Khoury College of Computer Sciences Sept. 2020 - Present

Expected May 2024

Candidate for Bachelor of Science in Computer Science and Business Administration

*Honors*: GPA 3.61 / 4.00 – Deans List, Deans Scholarship

Relevant Courses: Object-Oriented Design, Algorithms and Data, Programming in C++, Database Design,

Fundamentals of Computer Science 1 and 2, Mathematics of Data Models,

Discrete Structures, Introduction to Mathematical Reasoning

Activities: Women in Technology, Computer Science Mentoring Organization, Eon Dance,

Asian Student Union (Mentor)

Harvard University, Cambridge, MA

July - Sept. 2019, July - Sept. 2020

Honors: GPA 4.00 / 4.00

Relevant Courses: Introduction to Web Programming Using JavaScript, Great Ideas in CS with Java

Winchester High School, Winchester, MA

Sept. 2016 - May 2020

Honors: GPA 4.01 / 4.00 – National Honors Society, AP Scholar with Distinction

Activities: Technovation (Marketing Team Head), Red & Black Newspaper (Business Manager),

Public Speaking Club (President), High School Helpers Tutoring (Coordinator)

## **TECHNICAL SKILLS**

Languages: | Java | HTML | CSS | C++ | SQL | Bash | Python | JavaScript | DrRacket

Software/Systems: Intelli] | Visual Studio Code | LaTeX | Eclipse | Git | MySQL | Jupyter Notebook | Linux

# PERSONAL AND ACADEMIC PROJECTS

# Personal Website | HTML, CSS, JavaScript

Jan. 2022

• Designed responsive and resizable portfolio website displaying code projects, skills, and photography using HTML, CSS, and JavaScript.

- Built customizable strategy game using Java to transform a grid of different colors into one color within an allowed number of clicks.
- Incorporated Inheritance and Encapsulation from the Four Principles of Object-Oriented-Programming.
- Utilized Northeastern's jar library to represent graphics and simulate animations.

Mastermind | Java July 2021

- Developed Java game prompting users to decipher randomly-generated color key through instant feedback before game ends.
- Applied S.O.L.I.D principles from Object-Oriented Design including Single-Responsibility, Open-Closed, Interface Segregation, and Dependency Inversion.

## **Image Processing** | *Java (Java Swing)*

June 2021

- Pair-programmed interactive Java GUI application centered around layered image manipulation.
- Leveraged the Model, View, Controller architectural pattern to create images programmatically, import and export images, manipulate individual layers, and add image transformations.
- Implemented [Unit testing framework to ensure code functionality and robustness.

## **VOLUNTEER EXPERIENCE**

### **Farm Education Assistant** | *Wright Locke Farm*

*July – Aug. 2017, July – Aug. 2018, July – Aug. 2019* 

- Delivered efficient assistance to farm educators in planning lessons and daily activities for summer camp.
- Provided reception service by responding to inquiries and guided families with general information.

## FOREIGN LANGUAGES AND INTERESTS

Languages: Mandarin (Proficient), Spanish (Limited Proficiency)

Interests: Badminton, Archery, Painting, Photography, Chinese Classical Dance, Swimming, and Piano