

Katherine Zeng

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<https://www.linkedin.com/in/k-zeng/> | <https://github.com/kzeng24> | <https://kzeng24.github.io/PersonalWebsite/>

Availability: May – December 2022

EDUCATION

Northeastern University, Boston, MA *Sept. 2020 – Present*

Khoury College of Computer Sciences

May 2024

Candidate for Bachelor of Science in Computer Science and Business Administration

Honors: GPA [REDACTED] / 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

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 Computer Science with Java

[REDACTED] *Sept. 2016 – May 2020*

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

Relevant Courses: Honors Web Design I, AP Computer Science Principles

Activities: Technovation (Marketing Team Head), Red & Black Newspaper (Business Manager), Public Speaking Club (President), High School Helpers Tutoring (Coordinator)

TECHNICAL KNOWLEDGE

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

Software: IntelliJ, Visual Studio Code, Eclipse, Git, MySQL, Jupyter Notebook, Microsoft Office

Operating Systems: MacOS, Windows, Linux

PERSONAL AND ACADEMIC PROJECTS

Flood-It *Aug. 2021*

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

Mastermind *July 2021*

- Developed key-deciphering Java game where the user is prompted to guess the correct order of randomly-generated colors through instant feedback before the game ends.
- Applied S.O.L.I.D principles from Object-Oriented Design including Single-Responsibility, Open-Closed, Interface Segregation, and Dependency Inversion.
- Users interacted through single entry point on main function.

Image Processing *June 2021*

- Pair-programmed Java application centered around layered image manipulation.
- Included ability to display interactive GUI-based user interfaces with Java Swing, create images programmatically, import and export images, manipulate individual layers, and add image transformations.

FreeCell Card Game *May 2021*

- Created text-based Java program through IntelliJ that simulates a one-player card game.
- Implemented Model-View-Controller Framework.

INTERESTS

Badminton, Archery, Painting, Photography, Chinese Classical Dance, and Piano