# **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 2023

#### **EDUCATION**

Activities:

**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 3.62 / 4.00 – Dean's List

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

Database Design, Mobile Application Development, Networks & Distributive Systems, Fundamentals of Computer Science 1 & 2, Discrete Structures, Math of Data Models Women in Tech, Asian Student Union, Eon Dance, Generate Product Development

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

**TECHNICAL SKILLS** 

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

Software/Systems: IntelliJ | Visual Studio Code | | Eclipse | Git | MongoDB | MySQL | Firebase | Postman |

Microsoft SQL Server | Jira | Bitbucket | Sourcetree | Linux | Docker | LaTeX

Frameworks: Java Spring Boot | Angular | Kendo UI | Express.js | React Native

#### **EXPERIENCE**

#### Software Engineer | Generate Product Development, Boston MA

Jan. 2023 – Present

- Collaborate with agile team to create mobile app that pairs with wearable devices to provide mental health support using TypeScript, Express.js, and React Native.
- Implement iOS native UI components, timeseries collection, and authenticated CRUD operations to communicate with MongoDB database.

### Full-Stack Software Development Co-op | Entrust Corporation, Concord MA

*July - Dec. 2022* 

- Developed full-stack solutions on web applications and back-end systems, such as compromised key validation, account assignment, and record updates for salespeople.
- Utilized Java Spring Boot, JSP, Kendo UI, Angular, Microsoft SQL Server, Tomcat, and RESTful web services to build administrative tools that optimized experience for 150+ clients.
- Improved developer efficiency and business efforts by fixing bugs and writing Angular documentation.
- Organized wireframe meetings, presented demos, and partnered with senior architect to discuss features and enhancements with salespeople, support representatives, PMs, and developers.

#### **PROJECTS**

## **BGP Router** | *Python*

Feb. 2023

- Developed router that accepts and forwards JSON data to desired destination.
- Applied routing logic and IP address/subnet mask manipulation to demonstrate internet infrastructure.
- Managed API functions for managing multiple sockets.

## **Productivity App** | *Java*

June 2022

- Architected Android self-care app that helps users improve focus and manage distractions while studying.
- Authenticated, stored, and updated user information in cloud database (Firebase) after login.

## **Predator and Prey** | C++

April 2022

- Built simulation using C++, representing several predators chasing after their prey under realistic conditions.
- Incorporated encapsulation/object-oriented programming and prevented memory leaks.

## **Personal Website** | *HTML, CSS, JavaScript*

Jan. 2022

Designed a responsive and resizable portfolio website displaying code projects, skills, and photography.

#### **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 JUnit testing framework and S.O.L.I.D principles to ensure code functionality and robustness.