

# Katherine Zeng

(781) 434-8675 | [zeng.ka@northeastern.edu](mailto:zeng.ka@northeastern.edu) | Boston, MA 02115  
linkedin.com/in/k-zeng | github.com/kzeng24 | kzeng24.github.io/personal-website  
Availability: July – August 2024

## EDUCATION

<b>Northeastern University</b> , Boston, MA	<i>Sept. 2020 – Present</i>
<b>Khoury College of Computer Sciences</b>	<i>Expected Dec. 2024</i>
<i>Candidate for Bachelor of Science in Computer Science and Business Administration</i>	
<i>Honors:</i>	GPA 3.7 / 4.00 – Dean's List
<i>Relevant Courses:</i>	Object-Oriented Design, Web Development, Software Engineering, Algorithms & Data, Database Design, Mobile Application Development, Programming in C++, Networks & Distributive Systems, Foundations of Data Science, Math of Data Models
<i>Activities:</i>	Women in Tech, Generate Product Development, HackBeanpot
<i>Interests:</i>	Classical Chinese Dance, Piano, Badminton, Archery, Painting, Photography

## TECHNICAL SKILLS

<i>Languages:</i>	Java   Python   TypeScript   JavaScript   HTML   CSS   SQL   C++
<i>Software/Systems:</i>	Visual Studio Code   IntelliJ   Git   Postman   MongoDB   Jira   MySQL   Firebase   Android Studio   Microsoft SQL Server   Linux   Docker
<i>Frameworks:</i>	React   Spring Boot   Express.js   Angular

## EXPERIENCE

<b>Software Engineer</b>   HackBeanpot, Boston MA	<i>April 2023 – Present</i>
<ul style="list-style-type: none"><li>Participating in weekly agile meetings and code reviews using React and TypeScript to ensure seamless hackathon experience.</li><li>Optimized internal tools, migrated Python sorting algorithm to TypeScript, and elevated main site UI to accurately analyze 250+ hackers and engage potential sponsors.</li></ul>	
<b>Software Engineer</b>   Generate Product Development, Boston MA	<i>Jan. – April 2023</i>
<ul style="list-style-type: none"><li>Collaborated with cross-functional team to create mobile app that provides mental health support using TypeScript, Express.js, and React Native.</li><li>Implemented iOS native UI components, timeseries collection, and authenticated CRUD operations within MongoDB database tracking user health data, including heart rate and daily step counts.</li></ul>	
<b>Full-Stack Software Development Co-op</b>   Entrust Corporation, Concord MA	<i>July – Dec. 2022</i>
<ul style="list-style-type: none"><li>Developed full-stack solutions on web applications and back-end systems, such as compromised key validation, account assignment, and record updates for salespeople.</li><li>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.</li><li>Improved developer efficiency by fixing bugs and writing Angular documentation.</li><li>Organized wireframe meetings, presented demos, and partnered with senior architect to discuss features and enhancements with salespeople, support representatives, PMs, and developers.</li></ul>	

## PROJECTS

<b>Movie Exploration Hub (CineScope)</b>   <i>React, Node.js, MongoDB</i>	<i>May – July 2023</i>
<ul style="list-style-type: none"><li>Deployed web application that displays, filters, and finds movies using React, Bootstrap, Redux, Node.js, Express.js, REST APIs, and MongoDB.</li><li>Incorporated login authentication, state management, routing, and customized permissions for users.</li><li>Ensured responsive view and connection to external movie database API.</li></ul>	
<b>BGP Router</b>   <i>Python</i>	<i>Feb. 2023</i>
<ul style="list-style-type: none"><li>Built client and server-side code for packet routers to propagate JSON data across a network.</li><li>Applied routing logic, sockets, and IP address/subnet mask manipulation to navigate internet infrastructure.</li></ul>	
<b>Image Processing</b>   <i>Java (Java Swing)</i>	<i>June 2021</i>
<ul style="list-style-type: none"><li>Pair-programmed interactive Java GUI application centered around layered image manipulation.</li><li>Leveraged the Model, View, Controller architectural pattern to create images programmatically, import and export images, manipulate individual layers, and add image transformations.</li><li>Implemented JUnit testing framework and S.O.L.I.D principles to ensure code functionality and robustness.</li></ul>	