

STEVE LIU

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EDUCATION

Northeastern University

Sept. 2020 – May 2024

Candidate for Bachelor of Science in Computer Science, Minor in Mathematics

Boston, MA

- **GPA:** 3.78 / 4.00
- **Honors:** Dean's List (all semesters)
- **Relevant Coursework:** Algorithms and Data, Object Oriented Design, Database Design, Computer Systems, Fundamentals of Computer Science 1 & 2, Logic and Computation, Linear Algebra, Discrete Structures

EXPERIENCE

QA Automation Co-op

Jan. 2022 – July 2022

MFS Investment Management

Boston, MA

- Developed an application management tool in Java using Unirest and SnakeYAML to validate over 300 web service and front-end components by relating JSON data pulled across 6 software deployment APIs using YAML mappings
- Created Python scripts using TestComplete to automate manual smoke and regression test cases for the investment systems development team, reducing average testing time by 84%
- Deployed a weekly-run security metrics report in Jenkins that summarized code vulnerabilities for over 80 internal applications using JSON data pulled from Contrast Security REST API calls
- Improved readability for a systems performance testing script by using abstraction to reduce lines of code by 78%

Fundamentals of Computer Science 1 Teaching Assistant

Sept. 2021 – Dec. 2021

Khoury College of Computer Science

Boston, MA

- Hosted weekly labs and office hours open to over 800 introductory computer science students to teach fundamental concepts such as recursion, data structures, and patterns for designing programs
- Worked and maintained constant communication with a team of over 100 other course assistants
- Assisted course instructors by grading students' exams, projects, and assignments

PROJECTS

Video Sharing Platform | React.js, JavaScript, HTML5/CSS, SQL, Java

Nov. 2021 – Dec. 2021

- Built a Spring RESTful web service for a mock video sharing platform using the JDBC and Java Persistence APIs to communicate with the backend MySQL database
- Programmed a front-end UI using the React.js library to allow users to create, modify, and/or delete their own channels, videos, and comments

Image Processor | Java, JUnit, Swing

June 2021 – July 2021

- Developed a GUI based image processor in Java using the standard Swing library with functionality to sharpen, blur, and apply filters such as grayscale and sepia to imported and procedurally generated images
- Applies design patterns such as model-view-controller, command, and decorator to maintain a flexible and efficient code base, enabling scalability for any potential new features

Maze Solver | Java

May 2021

- Implemented Kruskal's minimum spanning tree algorithm to build a custom random maze generator
- Allows users the capability to manually traverse the maze or automate the solution using depth or breadth first search

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, HTML5/CSS, C, SQL, Racket, Bash

Software: Linux, JetBrains IDEs, VS Code, Postman, Git, TestComplete, Jenkins, MySQL, JIRA

Libraries/Frameworks: React.js, Node.js, Spring Boot, Java Swing, JUnit, TestNG