# Zihao Zheng

Portfolio: https://zhengzihao2002.github.io • LinkedIn: https://www.linkedin.com/in/zhengzihao2002

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#### **SKILLS**

**Programming** Java • JavaScript • C++ • C • Python

Frameworks Bootstrap • Vue • ReactJS • Spring Boot

**Tech** Git • LaTeX • Nginx • Tomcat • IntelliJ IDEA • Eclipse • PyCharm • Maven • Postman

Language | English • Mandarin Chinese • Korean (Basic)

#### **EDUCATION**

#### Bachelor of Computer Science (B.S.), Rutgers University, CGPA: 3.6/4.0

Relevant Coursework: Data Structures, Prin Info & Data Mgt, Software Methodology, Machine Learning Principles, etc. Awards/Honors: On Deans list for more than 4 semesters consecutively

## **EXPERIENCES/PROJECTS**

## Spacecraft Leak Detection Simulation in Python

Oct 2023

- Led a group of 3: Assign as the project lead, organized the project layout, helped teammates debug.
- Implemented algorithms such as A\* and BFS for efficient leak detection in a simulated ship environment.
- Utilized Bayesian interference to enhance bots' decision making in dynamic scenarios and improved efficiency.
- Used Pygame to develop an GUI showcasing simulations with interactive visuals and background music.

Chess Game Mar 2023

- Built a Chess Game application that allows two players to play against each other.
- Debugged and resolved complex issues related to game rules and user input.
- Used the Model-View-Controller (MVC) design pattern to separate game logic and data.

Android Photos May 2023

- Developed an Android photo management app, focusing on a user-friendly UI/UX, using Java and XML.
- Implemented a comprehensive CRUD framework for image and album handling with tag-based searching.
- Championed code quality with meticulous reviews, leveraging Gradle and MVC architecture for optimal app performance on Nexus 4 (API 29).

Photos Apr 2023

- Developed a JavaFX photo management program with a user-friendly GUI for image organization and storage.
- Directed a team of 2: organizing meetings, assigning tasks, and assisting with code debugging and problem-solving.
- Applied Java and JavaFX to build a secure login and CRUD operations for user accounts, albums, and photos.

### Task Agenda (Front-end)

Aug 2022

- Developed a responsive agenda website that implemented CRUD operations.
- Used: HTML, CSS, JavaScript, jQuery, JSON. Live Demo: https://zhengzihao2002.github.io

Songlib Feb 2023

- Developed a JavaFX application that mimics a song library.
- Debugged and resolved complex issues related to game rules and user input.
- Employed version control with Git for collaborative development and code management.