Mengzhu Ou

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linkedin | github | portfolio

EDUCATION

Georgia Institute of Technology   **August 2022 - December 2024**
B.S. in Computer Science, GPA 3.93   Atlanta, GA

EXPERIENCE

Travelers   **June 2023 - August 2023**
Technology Leadership Development Program   Hartford, CT
- Championed Test-Driven Development methodologies and CI-CD tool Jenkins to orchestrate an in-house MergeMania tool to streamline feature change analysis, leveraging Java, Spring Boot, and React.js for a robust full-stack solution.
- Implemented critical features, including enforcing text field restrictions, seamlessly connecting mock backend endpoints with the front end, and enhancing user experience with functionalities such as CSV export, loading icons, and message alerts.
- Contributed to a harmonious and collaborative work environment via Pair Programming using VS Code Live Share and met all UI requirements.

MessageGears   **January 2023 - May 2023**
Software Engineer Intern   Atlanta, GA
- Focused on back-end development on unit tests using Mockito to validate and verify Java code functionality, ensuring adherence to business requirements and user expectations during code upgrades.
- Developed server-side validation and error handling to ensure data integrity and prevent unauthorized access or modification, providing a secure and reliable database management system.

Southern Automation Logistics & Technology   **January 2022 - May 2022**
Software Developer Intern   Statesboro, GA
- Adopted agile and scrum methodology in full-stack development leveraging JavaScript, jQuery, HTML, CSS, and C#.
- Tinkered with SQL queries for "sort-calendar" task and updated revised procedures with SQL database and Visual Studio database for commits and future reference.
- Overcame, and excelled by achieving high levels of productivity, focus, and determination to finish 40 assigned items and test 20 items.

SOFTWARE PROJECT

Word Snake Game (https://nina-wordsnake-xv28l.ondigitalocean.app/)
- Developed an engaging user-friendly website application using React Typescript that allows users to play with English vocabularies through unique game rule, compete with others via Leaderboard, and share feedback.
- Integrated WordCloud library allowing users to observe the frequency of input from other users worldwide.
- Incorporated persistent data storage to archive words. Leveraged caching for recently accessed words.
- <u>Utilized</u>: React Typescript, Google Cloud Firestore, Local Persistent Data, Caching, Web Dev

15 Puzzle Game (https://nina-15puzzle-tjrkl.ondigitalocean.app/)
- Crafted the application using React Typescript that allows users to play 15 Puzzle.
- Garnered acclaim from over 1,000 users globally and attracted over 130 users to compete on the Leaderboard.
- <u>Utilized</u>: React Typescript, Google Cloud Firestore, Web Dev

Database Management
- Served as a Project Manager and Software Developer for the Flight Database Management project, with a focus on efficient data storage and retrieval by leveraging MySQL stored procedures to optimize database operations and reduce complexity.
- Specialized in backend development for 80% to implement RESTful APIs, while contributing 30% of the frontend code.
- <u>Utilized</u>: Java, React.js, MySQL, Postman, Web Dev

TECHNICAL SKILLS

Proficient	Java | SQL | React.js | Typescript |Python | C# | HTML/CSS | JavaScript | Tailwind CSS
Familiar	MongoDB | C | C++ | jQuery | Bootstrap | Django | Ruby | Go | NoSQL | Vue.js
Technologies	Jira | Figma | AWS | Visual Studio Code | Git | Postman | Azure | Unity | Jupyter | Google Cloud Firestore