Hailin Zeng

h.zeng@ufl.edu | h.zeng.861@yahoo.com | 407-461-7683 | Gainesville, FL
https://www.linkedin.com/in/hailin-zeng/ | https://github.com/hhhlin5?tab=repositories

Education

Bachelor of Science in Computer Science 05/2022-12/2024
University of Florida, Gainesville, FL GPA: 3.66 / 4.00

Master of Science in Computer Science 01/2025-12/2026
University of Florida, Gainesville, FL GPA: 3.50 / 4.00

Technical Skills

- Programming Languages: C++, Java, Python, JavaScript, TypeScript, SQL, R, MATLAB
- Frontend & Backend: HTML/CSS, React Native, React.js, Vue.js, Bootstrap, Node.js, Flask, Django, Erlang/OTP
- DevOps & Cloud & Databases: Docker, AWS, Linux/Unix, PostgreSQL, MangoDB
- Development Tools & Platforms: Git/GitHub, Jupyter Notebook, Android Studio, Expo, Figma

Experience

Outlier AI *(remote)* 08/2025 - now

AI Data Specialist (RLHF & Prompt Engineering)

- Applied Reinforcement Learning from Human Feedback (RLHF) by creating organized prompt experiments and providing evaluation reports that guided model optimization.
- Designed and executed structured tests targeting different prompt styles and parameters, thereby enhancing model performance.
- Carefully curated and ranked model response pairs for RLHF, boosting internal usefulness evaluation by 10%.

2021 Intercollegiate Programming Competition *(python)* 04/2021

Contestant

- Took part in a programming competition that included coding challenges and algorithmic problem-solving. Python was used to implement algorithms, optimize code for time and space complexity, and conduct rapid prototyping.
- Developed effective solutions for a range of challenging issues, such as combinatorial algorithms, data structures, and dynamic programming. Improved logical and analytical abilities translated a large number of real-world issues into programming issues.

Projects

Android Travel Planning App --- TripTrails *(Mobile Dev)* 08/2024 – 12/2024

Frontend Developer | TypeScript, HTML/CSS, React Native, Android Studio, Expo, Git

- Collaborated with team members to transform **UI/UX** wireframes and prototypes in **Figma** into fully functional cross-platform mobile applications. Developed front-end user interfaces use **TypeScript** and **JavaScript** with **React Native**, ensuring user has premium experiences.
- Integrated **Google Maps API** to deliver interactive map views, location recommendations, and route planning capabilities. Implemented a calendar dashboard UI enabling users to effortlessly view, add, delete, edit, and enabled **iCal format** support for calendar sharing. Significantly enhanced the convenience and practicality of travel planning while optimizing the user experience for schedule management.
- Architected and developed a full-stack mobile solution using **Expo** to manage the project configuration and simplify the build process. Utilized **Android Studio** as the primary IDE for advanced debugging, performance profiling, and emulator management, significantly improving development efficiency and ensuring optimal resource utilization.
- Applied **ESLint** and **Prettier** for maintaining high code quality and consistent formatting standards. Utilized **Jest** for **unit testing**, reducing communication overhead in team collaboration, and ensuring the app's functionality, robustness, and reliability across different user workflows.

Operating System in Reptilian 01/2024 – 05/2024

Core System Builder | C++

- Implemented **custom system calls** using C++ in **Reptilian**. Designed and implemented an **API** for interacting with kernel log levels and managing diagnostic data, which provides foundational insights for system monitoring.
- Built a **custom memory manager** implementing algorithms for efficient tracking, allocation, and deallocation, with correctness validated through extensive memory leak and error testing. Optimized memory fragmentation handling by implementing block merging and efficient utilization, significantly boosting system performance.
- Developed a **FUSE-based** user-space filesystem daemon, enabling read/write operations on **WAD archives**. Demonstrated proof-of-concept functionality for **file system** operation and **cloud storage** service implementations.

Integrated Grading System *(Full stack)* 01/2024 – 05/2024

Full Stack Developer | C++, JavaScript, HTML/CSS, React.js, Node.js, MangoDB, AWS, Docker, Git

- Engineered a responsive and user-friendly frontend interface using **React.js**, which enabled students and instructors to seamlessly view, submit, and manage grades, and integrated automated grading scripts for coding assignments. Improved operational efficiency by reducing manual grading time by 50%.
- Designed and secured the backend API using **Node.js and Express**. Used **MongoDB** to efficiently store and manage diverse data types like user profiles, assignments, and grading rubrics. Implemented **role-based access control** strict authorization between user types (Admin, Instructor, Student), enhancing application security and data integrity.
- Architected, containerized, and deployed the full-stack application on **AWS**. Used **Docker** to package the **Node.js** backend and **React.js** frontend into portable containers, simplifying dependencies and guaranteeing environment consistency.

Certifications & Licenses

AWS Certified Cloud Practitioner – Basic (pending)