Fernando Gonzalez-Cruz

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EDUCATION

Rice University Houston, TX
Bachelor of Science in Computer Science, GPA 3.9 Expected May 2026
Relevant Coursework: Data Structures and Algorithms, Computer Systems, Concurrent Program Design, Object-Oriented Program Design, Fundamentals of Computer Engineering, Probability & Statistics, Linear Algebra
Activities/Societies: SHPE, Management Leadership for Tomorrow, Colorstack.

TECHNICAL SKILLS

Programming/Markup Languages: Java,Javascript/Typescript,Go, C/C++, Python, HTML/CSS, LaTeX
Frameworks/Libraries: Node, Express, GraphQL, MongoDB, mongoose, React, React Native, SDL

EXPERIENCE

Chevron Houston, TX
Software Engineering Intern Jun 2024 – Present
- Working on the globally-deployed incident reporting system as part of the Health, Safety, and Environmental team.
- Leveraging a combination of C#/.NET, Python, SQL server, Microsoft Azure, and Ansible under the agile framework for project development.

RiceApps Houston, TX
Software Developer Jun 2023 – Present
- Developer for a student-led group focused on developing software for social good.
- Collaborated with a team of 10 developers in partnership with the Texas Heart Institute to develop CardioCrew, a mobile app for centralizing and coordinating community fitness opportunities in the Houston area; developed both frontend and backend components using the MERN stack.
- Streamlined & enhanced the user experience for a Rice-exclusive ride-share coordination app with over 1000+ registered users by leveraging an SMS messenger API in conjunction with GraphQL and MongoDB to programmatically generate notifications & updates.

PROJECTS

Concurrent Web Proxy (C)
- Leveraged thread-based concurrency design patterns to implement a web proxy, capable of servicing hundreds of concurrent HTTP/1.0 & HTTP/1.1 client requests.

CHIP8 Interpreter (Go)
- Implemented a bytecode interpreter for the CHIP8 interpreted programming language, with 36 opcodes and 4kb of RAM.

Feedback and Evaluation via Automated Testing (Java)
- Utilized object-oriented design patterns to implement an autograding program for python scripts, leveraging a greedy approximation of the hitting-set problem to programmatically generate concise black-box test suites.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Management Leadership for Tomorrow Washington, DC
Career Preparation Fellow Jan 2024 – Present
- Accepted into a selective 18-month professional development program for high-achieving diverse talent.
- Complete business case studies and assignments to grow leadership and technical skills.
- Attend conferences hosted by industry leaders, such as Jane Street, LinkedIn, and Bloomberg.

Rice University Houston, TX
Teaching Assistant Aug 2023 – Dec 2023
- Held weekly office hours open to over 300+ students.
- Elucidated introductory concepts in computer science ranging from developing software artifacts to algorithm implementation in python.
- Graded biweekly homework assignments as well as exams, providing students with concise, actionable feedback on the correctness and quality of their work in a timely manner.
- Met weekly with a team of 40+ TAs and instructors to discuss common pitfalls in student understanding, as well as ways to maximize pedagogical effectiveness.