ERIC HERNANDEZ

eric-hdez@proton.me | (562) 940-7822 | linkedin.com/in/eric-hdez | eric-hdez.dev | U.S. Citizen

SKILLS

Programming Languages: C, C++, Python, TypeScript, JavaScript, SQL, HTML/CSS, Fortran
Web Technologies: React.js, Node.js, Express.js, Next.js, Vue.js, REST APIs, GraphQL
Tools and Databases: PostgreSQL, MySQL, Comdb2, Redis, Docker, Linux, Git, CMake

EXPERIENCE

Bloomberg LP | Software Engineer   Mar 2024 - Present
- Implemented strategic caching layers for a fixed income benchmark database that handles over 1 billion daily queries, improving system response rate and reducing database CPU usage by over 90%
- Improved visibility of fixed income benchmark indices on the Bloomberg Terminal by deploying a microservice that boosts data accessibility and reduces query response times
- Enhanced multiple API endpoints of an entity data microservice to read from a new database that expands the available data by 10+ fields
- Leading a team initiative to modernize legacy systems and workflows, focusing on reducing technical debt and enhancing system stability

UC Santa Cruz IT Services | Software Developer   Jan 2023 - Sep 2023
- Migrated a poster printing web app service used by 16,000+ students and faculty to a new web stack
- Enhanced payment integration error handling and presentation, streamlining the payment process for users
- Improved frontend form validation and data formatting, ensuring accurate and complete data for the backend
- Kept product owner/stakeholders updated on project status and collaborated to prioritize MVP features for production
- Collaborated with service management team to maintain and update documentation for web apps in our portfolio

NVIDIA Corporation | Software Engineer Intern   Jun 2021 - Aug 2021
- Collaborated to design and implement a Code Review Framework that detects security and styling defects in a Perforce code review changelist, improving code quality for an org of 20+ engineers
- Implemented the main runner, which retrieves a Perforce changelist, runs configured analysis tools on the files, and posts automatic feedback to the Perforce review
- Assisted in testing and debugging a security bug in the GPU resource manager for Linux platforms

PROJECTS

Baskin Marketplace | TypeScript, Next.js, React.js, Express.js, GraphQL, PostgreSQL
- Collaborated with five developers to design, develop, and deploy a full-stack marketplace web app for our senior capstone project
- Developed a backend microservice for the messaging platform using Express.js, GraphQL, and PostgreSQL
- Built frontend messaging components with React.js and Joy UI that integrated with the messaging microservice
- Performed automated unit testing on components and microservices to ensure full functionality and code coverage

Multi-threaded HTTP Server | C, Linux
- Designed a robust multi-threaded HTTP server in C, capable of serving atomic GET, PUT, and APPEND requests
- Implemented asynchronous IO using epoll for robust event monitoring on client connections, similar to nginx
- Conducted stress testing and fixed bottlenecks, resulting in a system run time improvement of more than 2x

EDUCATION

University of California Santa Cruz | B.S. Computer Science   Sep 2019 - Jun 2023
GPA: 3.89
Notable Courses: Computer Systems Design, Computer Architecture, Compiler Design, Full Stack Web Development

ORGANIZATIONS

Society of Hispanic Professional Engineers, Professional Chapter | Member
Bloomberg Latinx in Tech | Member