EERO GALLANO

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EDUCATION

UC BERKELEY
Bachelor's in Computer Science
August 2018 - Dec 2020
GPA: 3.76 / 4.0

ORANGE COAST COLLEGE
Computer Science Transfer
August 2016 - May 2018
GPA: 3.84 / 4.0

LINKS

github.com/gallanoe
linkedin.com/in/eerogallano

COURSEWORK

SWE
Operating Systems
Database Systems
Programming Languages and Compilers
Parallel Programming
Software Engineering
Algorithms
Data Structures
Machine Structures

AI/ML
Artificial Intelligence
Machine Learning
Deep Neural Networks
Natural Language Processing
Probability and Random Processes
Convex Optimization
Theoretical Statistics (Graduate)
Game Theory

SKILLS

PROGRAMMING
Java • Typescript • Python • Rust

TECHNOLOGIES
AWS Ecosystem • React + Redux • Pandas

EXPERIENCE

SOFTWARE DEVELOPMENT ENGINEER Amazon | June 2021 - Present
Worked with a team to build a multi-tenant secure communications solution for diverse finance operations teams. Key projects include:

- Designed and implemented a high-performance centralized configuration service from the ground up, achieving sub-10ms latency for improved system responsiveness.
- Led development of GDPR-compliant data deletion system across microservices architecture, collaborating with a 5-person team to ensure data privacy and regulatory adherence.
- Introduced load testing into our CI/CD workflow to more easily identify and address performance bottlenecks.
- Implemented an approvals feature to enhance manual communication accuracy and prevent errors in customer interactions.
- Architected and implemented a custom multi-tenant AuthN/Z system with secure payload forwarding, leveraging asymmetric cryptography and JWTs to enhance multi-tenancy and decouple security mechanisms from existing clients
- Modernized service UI by integrating real-time notifications using WebSockets, and refactored the underlying infrastructure to adopt an event-driven architecture, improving system reactivity and scalability.

PERSONAL PROJECTS

HANGMEN Online multiplayer game
A web application that turns Hangmen into an online multiplayer party game. Built using Node.js back-end and Elm + CSS front-end. Link: hangmen.io

RESEARCH PROJECTS

SIGNAL PROCESSING METHODS FOR NOISE-RESISTANT CNNS
Deep Neural Networks
Worked in a group of three to design and test image preprocessing methods to protect state-of-the-art mobile architectures against noisy and adversarial inputs. Used Python and PyTorch to load and test method designs.

USING INTERACTIVE PARTICLE SYSTEMS TO MODEL SPREAD OF MISINFORMATION Probability and Random Processes
Worked in a group of three to model the spread of misinformation using interactive particle systems and ran simulations of the model to test hypothesis concerning containment of misinformation. Used Python with SimPy and NetworkX libraries.
Link: github.com/gallanoe/mis-sim