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
Python • Java • C • C++
Javascript • HTML/CSS • SQL • bash
Elm

TECHNOLOGIES
PyTorch • Tensorflow • AWS Ecosystem (EC2, S3, Sagemaker)
Node.js • IntelliJ • Visual Studio

OTHER
Data visualization • Web scraping

PERSONAL PROJECTS

STONKS Data visualizer
A local desktop application that computes, models, and visualizes various statistics of selected stock market data. Built using Python back-end and Plotly Dash + CSS front-end.
Repo link: github.com/gallanoe/stonks

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

COURSE PROJECTS

RELATIONAL DATABASE SYSTEM Database Systems
Implemented a fully functional database that optimizes queries by implementing the underlying indexing structures, query iterators, join algorithms, cost estimation, query optimization, and concurrency control, etc., for a SQL relational database. Database was built using Java.

CHOCOPY COMPILER Programming Languages and Compilers
Implemented a compiler for the ChocoPy language, a statically typed dialogue of Python 3.6, for the RISC-V ISA by implementing the parser, lexer, and code generation portions of a compiler. 1st place in four of five categories in a compiler performance tournament. Compiler was built using Java.

PINTOS Operating Systems
Implemented elements of a modern operating system such as fairer task scheduling, synchronization variables, system calls, cached file systems, etc. The OS was implemented in C.

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 adverserial 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

EXTRACIRRICULAR ACTIVITIES

PILIPINX ASSOCIATION OF SCIENTISTS, ARCHITECTS, AND ENGINEERS (PASAE) Computer Science Representative Intern
Reached out to recruiters and past PASAE alumni to establish connections for job opportunities, tech tours, and related resources specifically for Filipino students working in STEM fields.

OCC DATA SCIENCE AND AI CLUB Member
Convened weekly to explore topics in machine learning and data science.