



gallanoeero@gmail.com



Berkeley, CA

Costa Mesa, CA

EDUCATION

Fall 2020

Fall 2018 - University of California, Berkeley

B.A. Computer Science – 3.76/4.00

CS Representative Intern at PASAE

Completed the Honors Program

Member of the Data Science and Artificial Intelligence Club

PROJECTS

(Ongoing) Stonks: Visual Data Analyzer Language: Python, HTML/CSS | Tools: Plotly, Dash, Flask

Built a local application that visualizes various statistics of selected stock market data.

Repo link: github.com/gallanoe/Stonks

Hangmen Language: HTML/CSS, Javascript, Elm | Tools: AWS Ecosystem

Designed and built a web application that turns Hangman into an online multiplayer party game. Link: hangmen.io

Repo link: github.com/johnchinjew/hangmen

Robust CNN Classifier Language: Python | Tools: PyTorch, Google Compute Engine

Designed and tested various image preprocessing methods to protect state-of-the-art mobile architectures such as MobileNet and EfficientNet against adverserial inputs on the Tiny-Imagenet dataset.

Research project for CS 182, Deep Neural Networks

Relational Database System

Language: Java

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.

Course project for CS 186, Database Systems

Using Interactive Particle Systems to Model Spread of Misinformation Language: Python

Modeled the spread of misinformation using interactive particle systems and ran simulations of the model to test hypothesis concerning the containment of misinformation.

Research project for EECS 126, Probability and Random Processes

Repo link: github.com/gallanoe/mis-sim

ChocoPy Compiler

Language: Java | Tools: JFlex, CUP

Implemented a compiler for the ChocoPy language, a statically typed dialect of Python 3.6, for the RISC-V ISA by implementing the parser, lexer, type checker, and code generation portions of a compiler. 1st place in four of five categories in a compiler performance tournament.

Course project for CS 164, Programming Languages and Compilers

Language specification: ChocoPy

PintOS Language: C

Implemented elements of a modern operating system such as fairer task scheduling, synchronization variables, system calls, cached file systems, etc.

Course project for CS 162, Operating Systems and Systems Programming

TECHNICAL SKILLS

Languages Python, C, C++, Java, Javascript, Elm, bash, HTML/CSS

Technologies PyTorch, Tensorflow, PostgreSQL, AWS Ecosystem (EC2, S3, SageMaker), Google Cloud Platform,

IntelliJ, Visual Studio