HALEY INZUNZA

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PROFICIENCIES

Coding Languages: C++, Golang, Java, Python, C, MIPS Assembly Language, C#, HTML, CSS, Javascript Technologies: Git, Docker, Kubernetes, Visual Studio, Unreal Engine, Unity Engine, Jupyter Notebook, Tailwind, React Interests: Drawing/Painting, Collecting Comic Books, Knitting, Video Games, Film Photography, Snowboarding

WORK EXPERIENCE

Backend Software Engineer Apprentice - Inference Platform

Santa Monica, CA August 2024 – Present

Snap, Inc.

- Enhanced observability in machine learning (ML) pipeline for ad and feed recommendations and MyAI chatbot.
- Optimized ML debugging efficiency by creating tools for managing ML model updates and inspecting feature logs.
- Created Grafana dashboards displaying various metrics for Tensorflow and Pytorch ML models.
- Deployed and managed applications running on Kubernetes and GCP.

Visualization Intern - Multimedia & Game Programming

El Segundo, CA

Science Applications International Corporation (SAIC)

June 2023 - August 2023

- Engineered a U.S Space Force sponsored war-game simulation to demonstrate military actions and responses.
- Integrated MATLAB algorithms for simulating the maneuvering of space assets into Unreal Engine.
- Developed a system for players to choose assets and actions to conduct operations in both single and multiplayer modes.

Head Undergraduate Teaching Assistant - I&CS 46 Data Structures & Algorithms

Irvine, CA

University of California, Irvine - Donald Bren School of Computer Science

January 2022 - January 2024

- Taught advanced algorithm analysis, data structures, and sorting algorithms in classes of 300+ undergraduate students.
- Revamped the foundation of the class by restructuring lesson plans, homework assignments, and exam materials.
- Trained 25+ undergraduate teaching assistants by hosting weekly meetings and assigning roles for course activities.

Undergraduate Teaching Assistant & Grader - CS 161 Design & Analysis of Algorithms

Irvine, CA

University of California, Irvine – Donald Bren School of Computer Science

January 2023 - January 2024

- Taught divide-and-conquer, dynamic programming, and greedy algorithms in classes of 300+ undergraduate students.
- Graded and provided feedback on assignments and exams.
- Organized office hours sessions to help students prepare for exams and meet academic objectives.

PROJECTS

3D Mesh Reconstructor | *Python, NumPy, Matplotlib, Jupyter Notebook*

- Designed a program that produces 3D mesh reconstructions of objects from collections of structured light scans.
- Based algorithm on concepts of camera calibration, 3D transformations, triangulation, and mesh generation.

We Got Compagnie! | *C++, Unreal Engine, FMOD Studio*

- Crafted a player combat and base audio track for a student video game project under the UCI Video Game Design Club.
- Winner of IEEE's 2023 Gamesig Student Showcase Special Recognition Award for Most Innovative Audio and User Interface and SGDA's Mini-grant for 2023's Student Games Showcase.

Minecraft Parkour AI | Malmo API, Python

- Constructed an artificial intelligence program that creates an optimal path for a computer player unit to traverse obstacle courses of varying difficulty in the game *Minecraft* using reinforcement learning.
- Solved 100% of courses accurately, taking approximately 75 iterations for easy levels and 210 iterations for hard levels.

EDUCATION

University of California, Irvine | Irvine, CA

December 2023