

Los Angeles, California

<https://github.com/abnerespinoza>

ABNER ESPINOZA

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EDUCATION

Irvine, California

University of California, Irvine

Fall 2018 – Spring 2022

- **Major:** Computer Science, B.S. (cumulative GPA: 3.96)
- **Relevant Coursework:** Data Structures; Algorithms; Probability; Artificial Intelligence; Machine Learning; Information Retrieval; SQL, NoSQL Databases; Operating Systems.
- **Activities:** Artificial Intelligence at UCI; Association for Computing Machinery; Society for Hispanic Professional Engineers (SHPE); Pacific Southwest Collegiate Debate Association.

EMPLOYMENT

Technology Summer Analyst

Goldman Sachs

June — August, 2021

- Developed a full stack web application using React and Java Spring Boot, then deployed it to private servers.
- Application required sophisticated data engineering to merge large amounts of data from various sources.
- Created internal REST APIs with PURE and Alloy (Goldman Sachs's open-source modeling language and IDE).

Software Engineering Intern

Base 11

January — June, 2020

- Designed, wrote, and executed Python scripts to verify computer vision software in model drones.
- Used Python to systematically check for the uptime of internal APIs.
- Developed a GUI application that displayed diagnostic information real-time for model drones and cars.

PROJECTS

Personal Website: <https://abnerespinoza.github.io> (for additional information)

- Developed a basic personal website that displays my contact information and my up-to-date resume.
- Built with HTML, CSS, and JavaScript.

Pong AI: <https://github.com/abnerespinoza/pong>

- Trains an agent using stochastic policy gradients on Pong with the OpenAI Gym framework.
- Uses the input frames of the game and the results of each round to train the neural network.
- Developed with help from Artificial Intelligence at UCI mentors during a club workshop.

Model Search Engine: <https://github.com/abnerespinoza/uci-indexer>

- Implemented a web crawler that indexed tens of thousands of pages within the *ics.uci.edu* domain while maximizing speed, politeness, and textual information content.
- Generated an underlying inverted index many gigabytes large, but only used a few megabytes in memory while maintaining a query response time under 300ms.
- Used React for the stylish frontend and Flask for the backend.

Pathfinding Visualizer: <https://github.com/abnerespinoza/pathfinding-visualizer>

- Developed a Python application that allows users to visualize and interact with the A* Search Algorithm.
- Includes functionality to set the starting point and the end point, add barriers, and resize the graph.

LANGUAGES AND TECHNOLOGIES

- English, Spanish — Proficient
- Python, Java, C, C++, JavaScript, SQL, HTML/CSS — Proficient
- PostgreSQL, Microsoft Office — Familiar

STRENGTHS

- Strong interpersonal skills, able to learn quickly, and passionate for moving fast and building great things.
- Preserve high standards for code quality, maintainability, and performance in any environment.