# Harrison Lloyd

Sacramento, CA

└ +1-916-919-7648 ☑ harrisonalloyd@gmail.com ⓒ <u>Personal Portfolio</u> in Harrison-Lloyd

# **EDUCATION**

#### California State University - Chico

2026

Bachelor of Science, Computer Science, Minor in Data Science

Chico, California

GPA - 3.7 / 4.0

Relevant coursework: Data Structures & Algorithms, Statistics & Probability, Discrete Math, Web & Mobile App Dev, Cybersecurity, Databases, Calculus 1-3 & Machine Learning

**Dean's List** 2023-2024

# WORK EXPERIENCE

#### Data Collection at MRK Medical Consultants

06/2023 - Present

Created a data collection initiative for legal expansion

Remote

- Led an initiative to build a database of over 4,000 personal injury lawyers across the country, allowing the business to expand via satelite locations
- Utilized Python with BeautifulSoup to automate web scraping tasks, improving efficiency by 40% and reducing manual input

#### JPMorgan Chase Virtual Internship Program

07/2024 - 08/2024

Gained hands-on experience in financial data analysis and algorithm development

Remote

- Troubleshooted and resolved 30 code issues, improving the functionality and performance of financial data applications.
- Used their open source library Perspective to generate a live graph that displays a data feed in a clear and visually appealing way for traders to monitor.

#### Computer Science Tutor

- Taught students computer science concepts in C++, including data structures and algorithms. Hybrid
- Assisted with coding assignments, debugging, and improving problem-solving skills.

### PROJECTS

#### Flappy Bird AI Game

- Built a Flappy Bird game using **Pygame** and integrated **NEAT** to train an **AI** agent.
- Created a fitness based training loop that rewards the AI for staying alive and passing pipes, leading to improvements over generations.

#### Machine Learning Image Classifier

- Developed a binary image classifier to distinguish between cats and dogs that achieved an accuracy of 98.27% using TensorFlow and Keras
- Implemented transfer learning with MobileNetV2 as a feature extractor and added a custom classification head for efficient training.
- Trained on **25,000** images to ensure a reliable performance

## Multiplayer Battleship Game

- Built a full-stack multiplayer Battleship Game featuring real-time gameplay between players.
- Designed an interactive user interface with dynamic game boards, draggable ship placement, and a built-in
- Built a scalable backend with **Express.js** to manage game state, interactions, and communication.

## **ISS Tracker**

- Tracked the ISS in real time with the Open Notify API and sent email alerts when it was overhead, using PythonAnywhere for continuous monitoring.
- Combined ISS position data with local sunrise and sunset times to send alerts only at night for optimal visibility.

# TECHNOLOGIES & EXTRACURRICULARS

- Languages: C/C++, Python, HTML/CSS, JavaScript, SQL, R.
- Technologies/Web Frameworks: Flask, React, Git, Flutter, REST APIs, Express, Node.js
- Extracurriculars: Members of ACM (Association for Computing Machinery) and Security Club.