

# Bailey Deng

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## EDUCATION

### University of California, Irvine

Sep 2024 - Jun 2026

*B.S. in Computer Science*

*Irvine, CA*

- Programming in C++, Java, and Python – Design and Analysis of Algorithms & Data Structures
  - Intro to AI, Information Retrieval, Machine Learning & Data Mining
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## PROFESSIONAL EXPERIENCE

### Logistics Chair

June 2025 - Present

*AI @ UCI*

*Irvine, CA*

- Planned quarterly events/socials and fundraisers for board and general members

### Intern

Jan 2025 - June 2025

*Chinese Association @ UCI*

*Irvine, CA*

- Worked in committees to plan the logistics and details for different events
- Shadowed different board members to gain better understanding of how the organization operates behind the scenes

### Volleyball Coach

Aug 2021 - May 2022

*Alhambra Unified School District*

*Alhambra, CA*

- Evaluated performance of athletes to identify weaknesses and provide feedback for improvement
- Provided guidance and mentorship to athletes to help reach full potential

### Web Development Intern

June 2021 - July 2021

*HonuSquare*

*Los Angeles, CA*

- Implemented a website using a newer and more modern interface
  - Helped transfer assets and record stock and other data using Google Sheets and QuickBooks
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## PROJECTS

### Web Search Engine

*Python, Git*

- Wrote an indexer and retrieval component from scratch
- Capable of handling tens of thousands of Web pages with a query response time under 300 ms
- Incorporates tf-idf scoring, anchor words for target pages and a web interface to improve quality of retrieval and search

### AWS DeepRacer

*Python*

- Trained an autonomous racing policy that drives a simulated car around time-trial tracks
- Placed 38 out of 678 submissions (top 6%) in the 2025 U.S. Open Practice leaderboard

### Checkers AI

*Python*

- Used Monte Carlo Tree Searching to make smart moves against bots in checkers
- 100% win/tie rate against random, poor, and average AI

### Pokemon Nuzlocke Discord Bot

*Java*

- Used the Java Discord API to create custom slash commands that interacts seamlessly with Discord servers
- Functions as a tracker for Pokemon Nuzlockes to record, edit, and delete data entries for Pokemon