in : linkedin.com/in/thl-leo/  $\mathbf{Q}$ : github.com/THL-Leo  $\mathbf{O}$ : thleo.co/

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# EDUCATION

# University of Southern California

Master of Science in Computer Science - Data Science

## University of California, Santa Cruz

Bachelor of Science in Computer Science, GPA: 3.82 Honors: Cum Laude with Highest Honor in the Major.

## EXPERIENCE

# AMD (Advanced Micro Devices)

Software Engineer Intern: Internal Tools Team

- Architected and developed a comprehensive dashboard using Python, Flask, MySQL, and Javascript, which enabled Product Verification and Test Engineers to monitor test pattern health and device performance over time.
- Optimized dashboard loading time from 13 seconds to 0.2 second by leveraging SQLalchemy, Redis, and asynchronous data loading to streamline data queries and reduce response times.
- Utilized asynchronous tasks from Celery to implement customized notification system for streamlined management of alerts and providing important insights to assist the users with better decision making.

# University of Southern California

Machine Learning Research Intern: FORTIS Lab

- Conducted benchmarking on various state-of-the-art outlier detection algorithms to evaluate their performance on large textual documents by importing Python library PyOD.
- Utilized the Machine Learning library SkLearn to preprocess and label various datasets into a suitable format for analysis.
- Coordinated team workflow and completed a paper in IEEE format and presented it in front of live audience in class.

# Projects

### **Discord Bot**

- Developed a Discord bot using Discord.py to automate job search processes, integrating web scraping functionality to extract latest job postings from Simplify's GitHub repository
- Implemented custom commands allowing users to efficiently query recent job updates and track their application statuses
- Designed and integrated an SQLite3 database system to store and manage job listings and user application data, enhancing data persistence and retrieval efficiency

### Be My Voice

- Built an accessible live ASL translation tool achieving 60% accuracy using OpenCV, MediaPipe, TensorFlow, and trained on custom datasets.
- Enhanced translation with OpenAI's ChatGPT-3.5 Turbo for contextual understanding and improved user comprehension.
- Developed an interactive UI with Bootstrap and JavaScript, using Flask middleware to integrate live ASL detection.

### Moodify

- Collaborated with teammates to develop Moodify, a standalone web service that uses the Google Gemini Pro Vision API to identify the theme and mood of uploaded photos, then suggests the top 10 songs that match accordingly.
- Integrated the Spotify API to ensure a smooth and secure login experience, allowing users to access Spotify's extensive collection of daily updated playlists.
- Utilized Reflex, a pure Python web framework, to develop a responsive and user friendly frontend and backend.

### SKILLS

Languages: Python, MySQL, PostgreSQL, JavaScript, TypeScript, Swift, Kotlin, React Native, C, C++, Bash, Java, Go

Tools: Playwright, BeautifulSoup, JUnit, RESTful api, Pvlint, MyPy, Pandas, Numpy, Flask, Jinja2, Celery, MariaDB, Redis, ECharts, AJAX, jQuery, Agile, Docker, Express.js, Node.js, GIT, matplotlib

Courses: Geospatial Data Management, Database Systems, Analysis of Algorithms, Artificial Intelligence, Deep Learning, Probability and Statistics, Full Stack Development, Mobile Application, Web Scraping, and Computer Networks.

Los Angeles, CA August 2023 - May 2025

Santa Cruz, CA October 2020 - June 2023

May 2024 - August 2024

Los Angeles, CA September 2023 - May 2024

August 2024 - Present

May 2024

November 2024

San Jose, CA