

# Leo Tsunghan Lee

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## EDUCATION

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### University of Southern California

*Master of Science in Computer Science - Data Science*

Los Angeles, CA

*August 2023 - May 2025*

### University of California, Santa Cruz

*Bachelor of Science in Computer Science, GPA: 3.82*

*Honors: Cum laude, Highest Honor in program.*

Santa Cruz, CA

*October 2020 - June 2023*

## SKILLS

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**Languages:** Python, SQL, NoSQL, PostgreSQL, JavaScript, TypeScript, Swift, Kotlin, React Native, C, C++, Bash, Java

**Tools:** Pandas, Numpy, Oracle Live SQL, Agile Methodology, Docker, Express.js, Node.js, GIT, matplotlib, open3d, OpenGL

**Courses:** Foundation of AI, Deep Learning, Database Systems, Probability and Statistics, Analysis of Algorithms, Full Stack Development, Mobile Application, and Computer Networks.

## EXPERIENCE

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### University of Southern California

*Machine Learning Research Intern*

Los Angeles, CA

*September 2023 - Now*

- Leading research endeavors in the outlier detection lab involves integrating deep learning, unsupervised machine learning, and supervised machine learning as a benchmark to identify anomalies within extensive textual datasets.
- Currently in the process of developing a comprehensive Python library dedicated to the compilation and integration of the outlier detection algorithms.

### University of Southern California

*Artificial Intelligence Research Intern*

Los Angeles, CA

*January 2024 - Now*

- Developed a Python script for merging ROS bag files at a generative AI lab, enabling seamless synchronization of data from multiple cameras and ensuring a unified timestamp for comprehensive analysis of robotic vision datasets.
- Currently leading the development of a CUDA-based Iterative Closest Point (ICP) script to transform an arbitrary point cloud to a reference point cloud.

### University of California, Santa Cruz

*Tutor*

Santa Cruz, CA

*March 2021 - June 2023*

- Conducted up to 10 hours of weekly office hours to provide comprehensive support to students' labs and coursework.
- Incorporated both online and in-person sessions to break down lab assignments into achievable objectives.
- Partnered with TAs and Tutors to provide sessions for over hundred students

## PROJECTS

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### ROS TimeAlign

*Project Lead*

*January 2024*

- Orchestrated the development of a Python script utilizing the rosbag library to merge and synchronize data from five separate camera bag files for accurate analysis.
- Implemented timestamp alignment techniques to harmonize the temporal data across multiple bag files, enhancing the reliability and consistency of the large-scale collected robotic data.

### Mail Clone

*Project Lead*

*September 2022 - December 2022*

- Developed a Gmail replica utilizing React states and hooks to dynamically update the mail interface.
- Integrated Material UI library to ensure a well-tested and user-friendly interface.
- Deployed comprehensive testing on frontend, backend, and end-to-end using the React Testing Library and Puppeteer.