Erik Nguyen

+1(949) 702-9192 | 20nguyened@gmail.com | linkedin.com/in/erik-nguyen20 | https://eriknguyen20.github.io/

Education

University of California, San Diego — La Jolla, CA
M.S. in Computer Science — *Sep 2024 - Present*
- **GPA: 4.00/4.00**, Expected Grad Date: *Dec 2025*

California State University, Fullerton — Fullerton, CA
B.S. in Computer Science — *Aug 2022 - Aug 2024*
- **GPA: 3.94/4.00**, Graduated with Summa Cum Laude Honors

Skills

Programming: Java, Python, C/C++, Go, C#, Javascript, Lua, HTML, LaTeX
Tools & Applications: Android Studio, VS Code, Docker, SQLite, Git/GitHub, Unit Testing, Excel
Frameworks & Libraries: PyTorch, TensorFlow, FastAPI, Flask, React, Pandas, NumPy, Scikit-Learn

Experience

Thales Avionics, INC — Irvine, CA
Software Engineer-AI Intern — *Jul 2024 - Oct 2024*
- Led the research and evaluation of a new internal Thales **LLM**, assessing its adoption potential among **30+** current software engineers. Compiled findings into a technical report and delivered **3** presentations to key stakeholders.
- Developed and executed over **150 JUnit** & **Mockito** test cases on the Android platform, ensuring full **JaCoCo** compliance for quality assurance.

CEDDI Lab — Fullerton, CA
Researcher — *Feb 2024 - Sep 2024*
- Designed a machine learning model for facial beauty perception, utilizing **vision/GNN-based deep learning** and bias-mitigation techniques. Improved prediction quality by **21%**, enhancing model reliability and fairness.

Khoi Turner, INC — San Clemente, CA
Software Engineering Intern — *Aug 2023 - Nov 2023*
- Developed firmware and communication protocols between a **Particle IoT microcontroller** and main controller to enable customer interaction via the **Blynk** web interface for cellular-connected water dispensers.

ASSURE-US Research Fellowship, CSUF — Fullerton, CA
Researcher — *May 2023 - Jul 2023*
- Developed a model predicting student dropout/graduation with **89%** accuracy using academic and socioeconomic factors. Presented at **SCCUR'2023** and **NCUR'2024** Conferences.
- Built a phenological model for cherry blossom bloom date predictions across Japan. Presented findings at **SIGKDD'2023** Conference for the SoCal Data Science Day track.

Honors & Awards

Most Innovative Project Of The Year, CSUF ECS Innovation Expo 2024 Competition — *Apr 2024*
Summa Cum Laude, Graduated with Honors at California State University, Fullerton — *Aug 2024*

Publications

Regression Guided Strategy to Automated Facial Beauty Optimization through Image Synthesis
Erik Nguyen *and Spencer Htin*
arXiv preprint arXiv:2501.00811, 2025

Racially Inclusive Approach to Facial Beauty Modeling Using Machine Learning
Erik Nguyen*, Sampson Akwafuo, Doina Bein, and Blessing Ojeme*
Proceedings of the 2024 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pages 4467–4473. IEEE, 2024

Presentations

GenAI Summit at UCSD — La Jolla, CA
Presenter for 2025 GenAI Summit at UCSD — *Feb 2025*

- Presented "Regression Guided Strategy to Automated Facial Beauty Optimization through Image Synthesis" as an academic poster.

National Conference on Undergraduate Research — Long Beach, CA
Presenter for NCUR'2024 Conference — *Apr 2024*

- Presented the project "Student Success Classification in Higher Education" as an academic poster.

Southern California Conferences for Undergraduate Research — Fullerton, CA
Presenter for SCCUR'2023 Conference — *Nov 2023*

- Presented "Student Success Classification in Higher Education" as an academic poster.

29th Knowledge Discovery in Data Conference — Long Beach, CA
Presenter for SIGKDD'2023 Conference — *Aug 2023*

- Presented "Phenological Prediction of Cherry Blossom Bloom Dates in Various Geographic Locations of Japan" as an academic poster for the Southern California Data Science Day track.

Projects

Bloomscape Japan | *Full Stack Web Application* — *Jun 2025 - Jul 2025*

- Built an AI-powered cherry blossom forecasting web app using **React**, **FastAPI**, **SQLite**, and **LightGBM**, with automated data updates managed by scheduled cron jobs and containerized using **Docker**.

TuneStacker | *Native Android Application* — *Jan 2023 - Present*

- Developed a music playlist management mobile app enabling users to import and sync playlists from platforms like YouTube. Integrated a built-in media player for offline listening to imported songs.

Caption Crafter | *Flask Web Application* — *Jan 2024 - May 2024*

- Integrated an NLP-based AI model with a Flask web application, leveraging image processing and deep learning to autonomously generate textual captions for user-uploaded images.