# Phi Hung Nguyen

Simi Valley, CA | nguyen.ph8299@gmail.com | 805-304-8470 | linkedin.com/in/phi-nguyen | My Portfolio

## EDUCATION

## University of California, Los Angeles (UCLA)

Bachelor of Science in Computer Science

Moorpark College

Graduated May 2023

Expected Graduation: Dec. 2025

Associate of Science in Computer Science, Mathematics, and Physics | GPA: 4.0 - Dean's List

## TECHNICAL SKILLS AND CERTIFICATES

Languages: Python, C, C++, JavaScript, HTML

Development and Visualization Tools: Git, Shell Scripting, Visual Studio Code, Tableau

Libraries, Frameworks, and Databases: React, Node.js, Firebase, Pandas, NumPy, Keras, TensorFlow, Scikit-learn

Certificate: Machine Learning Foundations from Cornell University, Break Through Tech (View Certification)

#### EXPERIENCE

Qualcomm

Aug. 2024 – Present

ML/AI Engineering Fellow

Los Angeles, CA

- Developing vision-language models using **Scikit-learn**, **PyTorch** and **Transformers**, incorporating techniques like cross-modal attention and transformer-based encoders to enhance image captioning and **Visual Question Answering** (**VQA**) for public surveillance and autonomous systems.
- Preprocessing and aligning multimodal image-text data (JPEG, CSV) through techniques like data augmentation (flipping, rotation) and **tokenization** (BERT), ensuring consistency and seamless integration for VQA tasks.
- Training models on DOCVAQ and DamageCar datasets using deep learning techniques such as transfer learning and fine-tuning, with the goal of improving object detection and hazard identification for real-time applications.
- Researching real-time object detection using edge computing technologies and the **YOLO** model, aiming to enable faster and more reliable hazard identification for autonomous vehicles and public safety systems.

#### Break Through Tech AI UCLA

May 2024 - Present

 $ML/AI\ Fellow$ 

Los Angeles, CA

- Selected from 3000+ applicants to participate in an intensive 12-month program mastering data analysis pipelines.
- Leveraged Neural Network models to address diverse tasks, including regression through Image Recognition, Computer Vision, and Natural Language Processing.
- Strengthened expertise in data preparation, modeling, and evaluation using advanced tools like NumPy, Pandas,
  Scikit-learn, and Keras.

#### Projects

## CLASSYNC — Software Engineer | GitHub Repository — <u>View Website</u>

Jan. 2024 – Mar. 2024

- Collaborated in a team of 5 to create an alternative UCLA Degree Audit System tailored for CS students.
- Architected and managed the **Firebase** Realtime Database, optimizing data structure for efficient data retrieval and scalability, and seamlessly integrated it with **React** components to ensure a responsive user experience.
- Designed and implemented a robust authentication system using Firebase Authentication, ensuring that the data is persistent, secure, and accessible only to its respective owners.
- Oversaw the deployment of the finished build, ensuring the website is fully functional and accessible online.

#### IRON MAN Gauntlet - Hack Competition — Electrical Engineer | GitHub Repository

Jul. 2023

- Led a team of 3 to design a sensor-equipped gauntlet within 48 hours, enabling real-time data transmission and hazard detection.
- Engineered an **Arduino**-based circuit integrating ultrasonic, air quality, and temperature/humidity sensors, along with an **OLED** display and dynamic **LED** ring to alert users of environmental hazards.
- Collaborated with teammates on CAD and web dev to ensure seamless data transfer from the gauntlet to a website, earning the "Most Innovative Electrical Design" award for the LED ring's hazard-responsive color display.