# Phuoc Nguyen

Stockton, CA • (562) 579-7016 • h\_nguyen129@u.pacific.edu • linkedin.com/in/phuochnguyen17/

## **EDUCATION**

University of the Pacific, Stockton, CA

Bachelor of Science, Computer Science

Expected: Dec. 2025 GPA: 3.77

• Relevant coursework: Parallel Programing, Data Structure, Design and Analysis of Algorithms, Artificial Intelligence, Data Analytics, Linear Algebra, Intro to Statistics, App Development, Operating Systems, Programming Languages, Machine Learning, Computer Simulations, Web Development

## WORK EXPERENCE

## **Tutor – General Academic Tutoring Center**

Aug. 2023 – Dec. 2023

• Supported students with exam preparation and homework on math and programming classes

#### **Undergraduate Researcher – University of the Pacific**

Dr. Julia Olivieri – scRNA-seq data analysis

Aug. 2024 – Present

- Performed primary component analysis on scRNA-seq data
- Simulated other datasets using SPARSim to compare primary components
- Visualize data in R

#### SKILLS

Python, Java, C/C++, TensorFlow, PyTorch, OpenCV, pandas, scikit-learn, NumPy, Git, Linux, Bash, Docker, R, JavaScript

## **PROJECTS**

**Detecting sign language** (Python)

Jun. 2024 – Aug. 2024

- Wrote Python script to preprocess data WLASL, a dataset of 12000 videos describing 2000 common English words into images and XML files
- Utilized OpenCV for computer vision, and trained mobile\_v2, a lightweight convolutional neural network model for real time image recognition

Connect 4 with AI (Python)

Nov. 2023 – Dec. 2023

- Implemented Minimax algorithm to replicate the game Connect 4 for an AI agent against human
- Implemented Pygame library to animate the game

## Object Oriented 101 website (HTML, CSS, JavaScript, PHP)

Oct. 2024 – Dec. 2024

- Designed the rough layout of the website using Figma in a team of 3
- Led the front-end development of the website with HTML and CSS
- Developed and tested back-end code compiler/interpreter for users to practice programming on the website in JavaScript, PHP, and Flask

## Surviving Southwest RPG 2-D game (Java)

Apr. 2023 – May 2023

- Utilized OOP techniques in game loops, designing maps, obstacles, puzzles, enemy pattern
- Used GitHub for teamwork collaboration, including debugging and reviewing, between 5 members

#### Estimating Pi (C)

Feb. 2024 – Mar. 2024

- Implemented POSIX Pthreads API and mutex lock in Ubuntu Linux environment to parallelize a serial program that estimates the value of Pi
- Documented its scalability and efficiency as number of cores increased

#### Hotel room booking – data analysis (R)

Apr. 2023 – May 2023

• Analyzed and visualize correlations to determine relationships between factors that can affect room booking of a hotel in R

# LEADERSHIP/CAMPUS INVOLVEMENT

# Theta Tau - Professional Engineering Organization

Nov. 2022 – present

• Positions held: Professional Development Coordinator, Executive Board member – Corresponding Secretary