

# NUTTHAWAT PANYANGNOI

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# Career Objective

I have always been fascinated by computers, starting from a young age assembling hardware and experimenting with configurations. Through my studies and internships, I've gained hands-on experience building full-stack applications, developing mobile apps, training deep learning models, and assembling high-performance servers. I'm eager to continue learning and apply my skills to innovative projects in the technology industry.

#### **EDUCATION**

San Jose State University, San Jose, CA

May 2025

B.S. Computer Engineering, Minor: Computer Science

Las Positas College, Livermore, CA

May 2022

A.S. Computer Science, Minor: Math

#### Technical Skills

Programming: C, C++, Python, JavaScript, SQL, Verilog, HTML, CSS, mySQL, PostgreSQL, MongoDB, React

Deep Learning / ML: PyTorch, TensorFlow, NumPy, Scikit-learn, OpenCV, Jupyter, CUDA

Embedded Systems: Raspberry Pi CM4, TI MSP430, FPGA (Verilog/SystemVerilog), LTspice, Oscilloscope

Tools: Docker, VMware, Vivado, SolidWorks, Figma, Bash, Powershell, Zshell, REST API, Kubernetes

Hardware: BIOS Flashing, RAID, VPN, NAS, Diagnosing hardware, Hardware Troubleshooting

Operating Systems: Linux, Windows, macOS

## Work Experience

#### NASA Proposal Writing and Evaluation Experience

Aug 2024 - Dec 2024

Computer Engineer

Remote

- Conducted technical research on high-voltage battery tech for space missions, with laser charging integration.
- Pitched and co-authored an innovation proposal selected by NASA MSFC for further development.
- Collaborated with engineers to review innovative proposals and gained hands-on experience developing prototypes.

#### NASA Mission Concept Academy

Jan 2024 - Aug 2024

Program Analyst & Computer Engineer

Remote

- Worked with engineers on a simulated NASA Discovery Mission to execute a lunar water sample collection operation.
- Managed project timeline forecasting for major designed milestones (MCR, SRR, MDR) using NASA tools.
- Conducted entire mission cost estimation, resource analysis, instruments cost using NICM CERs/SERs and MCCET.

#### Mountain Cascade, Inc.

Mar 2020 - Aug 2023

IT Technician (Full-time)

Livermore, CA

- Provided comprehensive IT support, diagnosing hardware and software issues in Windows server environment.
- Performed hands-on BIOS flashing, RAID setup, VPN configuration, NAS setup, and server maintenance.
- Managed hardware lifecycle: break/fix, deployments, upgrades, and service requests.

# Amber System Technology

Frontend Software Developer (Part-time)

Apr 2018 – Mar 2020

Pleasanton, CA

- Developed and customized POS system UI to meet business clients' specific requirements.
- Led frontend development to ensureing align with customer requirements and their business goals.
- Built full-stack web applications leveraging modern technologies to address customer requirements.

# **Projects**

## FoodReal iOS Application (React Native, Tailwind, Expo, Firebase)

In Progress

- Building mobile app to encourage home cooking and food sharing with social engagement.
- Designed intuitive swipe-based interface with engaging UI.

#### Handheld Computing Device (C, C++, Linux, KiCad, LTspice, Raspberry Pi CM4)

In Progress

- Engineered modular computing system using Raspberry Pi CM4 and ClockworkPi v3.14.
- Built custom Linux OS including bootloader setup, device tree config, and optimization.

## Note Hub Web Application (Python, Flask, SQLAlchemy, Django)

Apr 2023

- Created Notion-inspired web app with Flask and SQLite for note management.
- Implemented secure session-based user authentication.

# Neural Network Classifier for Iris Dataset (PyTorch, NumPy, Pandas, Python)

May 2025

- Trained CNN on sign language dataset and deployed model to Raspberry Pi with webcam.
- Optimized inference with PyTorch quantization; evaluated latency and accuracy.

## Certifications

# NASA L'SPACE Mission Concept Academy

Aug 2024

• Completed 3.5-month program simulating NASA Discovery mission design process.

#### NASA Proposal Writing Evaluation Experience

Dec 2024

• Completed a 3.5-month pitch and research program; co-authored a proposal with NASA MSFC on high-voltage laser-chargeable battery innovation.

#### Google Foundations of Data Science

Jun 2025

• Completed professional training in data science foundations and analysis tools.

#### Google Get Started with Python

Jun 2025

• Completed Python programming course for data analysis and problem-solving.

## LinkedIn: Computer Components and Peripherals for IT Technicians

Jun 2025

• Completed training on hardware peripherals for IT technicians.