NUTTHAWAT PANYANGNOI (U.S. Citizen) lumiere-lab.com

panyangnoi.nutthawat@gmail.com linkedin.com/in/nathan-panyangnoi github.com/kur0neko

Career Objective

I'm a motivated and technically versatile Computer Engineering with hands-on experience in full-stack development, embedded systems, AI/ML, and IT infrastructure. With over three years plus of professional experience in frontend development and IT specialist, where I've built real-world solutions and worked in production environments. I'm proficient in Python, C/C++, JavaScript, SQL, Bash, and React, and I'm comfortable developing in Linux-based systems. Additionally, I have working knowledge of Verilog and machine learning, including experience with frameworks like PyTorch and TensorFlow.

EDUCATION

San Jose State University, San Jose, CA — **Dec 2025**
B.S. Computer Engineering, Minor: Computer Science — GPA: 3.327/4.0
Las Positas College, Livermore, CA — **May 2022**
A.S. Computer Science, Minor: Math — GPA: 3.4/4.0

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, Jetbrains products
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 — **Apr 2018 – Mar 2020**
Frontend Software Developer (Part-time) — Pleasanton, CA

- Developed and customized POS system UI to meet business clients' specific requirements.
- Led frontend development to ensuring 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 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.