Contact

www.linkedin.com/in/tuan-
nguyen-499530129 (LinkedIn)
www.iotsharing.com (Blog)
github.com/nhatuan84 (Personal)

Top Skills

Automation
Python (Programming Language)
Internet of Things (IoT)

Tuan Nguyen

Expertise in Deep Learning, Embedded System, IoT, Mobile
Development, Backend
Vietnam

Summary

I have over 14 years of hands-on experience across diverse fields in
the IT domain, including Deep Learning, IoT, Embedded Systems,
Telecommunications, Mobile Development, Backend, and QA. My
extensive expertise allows me to contribute at every project stage,
from concept to stable deployment, with high productivity and impact.

As a dedicated engineer, I continually strive to expand my skill set
in my free time, demonstrating a strong commitment to self-learning.
My work across various industries — from telecommunications,
automotive, AI, to automation — reflects my adaptability and
versatility. My contributions have consistently played a key role in
advancing project outcomes and helping companies reach their
goals.

My skills:
Main skills: Excellent at problem-solving, Quickly adapt to new
technologies
Programming languages: Python/C/C++/Java/Go(fundamental)/
Rust(fundamental)
Embedded System: MCU, IoT, Arduino, Linux
Artificial Intelligence:
- Deep Learning: CNN, RNN, Transformer, BERT, GAN, RAG, Deep
Reinforcement Learning
- Machine Learning
- Hands on Chatbot Development
- Hands on Data Analytics
- Libraries/Frameworks: OpenCV, Keras/Tensorflow/TensorRT/
TFLite, Pytorch, ChromaDB, numpy, pandas, matplotlib, sklearn,
TinyML, Cython (C/C++ Wrapper for Python), JNI (C++ Wrapper for
Java), Qualcomm SNPE SDK, NVIDIA Isaac SDK, …
Container: Docker
CI/CD: Jenkins, Python script
Android (C++/Java/Flutter):

- Applications and libgdx (game engine)
- Dart/Flutter
- Android SDK and NDK
Backend:
- Hands-on experience with PHP, AIOHTTP, and Django
Database:
- MySQL, PostgreSQL
GUI: PyQT, QT
QA: Unittest
Game Engine:
- PyGame, Libgdx (Java)
Project Tools: JIRA, Confluence, Git

Experience

Rotimatic
Engineering Manager and Platform Software Leader
May 2022 - Present (2 years 11 months)
Ho Chi Minh City, Vietnam

- Setup office

- Interview candidates

- Design the SW Architecture

- Apply Computer Vision to improve machine operations:

+ Implement traditional Image Processing methods

+ Deep learning (customize the CNN model to deploy on MCU)

+ Develop a tool for collecting data, data augmentation

- Design and Implement the Firmware (GUI LVGL, AWS IoT and Firmware update OTA via AWS S3, automatic controller, BLE), Application (Recipe Framework)

- Design and Implement the Application for controlling the machines remotely via AWS IoT, Websocket, UART, BLE. This application is also used in Customer Service Troubleshooting remotely (including camera streaming of the machine operation) and Product Manufacturing

- Design and Implement the Mobile Application (Dart/Flutter) for controlling the machines via Websocket, BLE.

Digital Media Professionals Inc.
AI Software Leader
July 2018 - Present (6 years 9 months)
Vietnam

- Lead technical topics
- Interview candidates
- Software Architecture design
- Consultant for Embedded Software and Deep Learning projects
- R&D Embedded System/Deep Learning projects
- Make prototype/demo for Proof of Concept

PROJECTS: Chip counting, Driver-assistance system (DAS), Digital Twins, Predictive Learning, Showcase Website streaming via WebRTC, Autonomous driving harvesting robot project, Accelerate 2D Convolution on ARM CPU using Arm Neon technology, Applications and Driver for AI SDK (FreeRTOS, Linux)

VinAI
AI Software Specialist
June 2021 - September 2021 (4 months)
Vietnam

- Design AI camera system for a smart building project
- Improve the performance of the AI camera software

Bosch
Senior Software Specialist
October 2014 - June 2018 (3 years 9 months)
Vietnam

I worked for Bosch/ETAS as a key member. I handled 80% of all projects: Video UnitTest, Configure/Generate/Test Autosar, and Firmware Update OTA for vehicles.

Bosch
Senior Software Engineer
July 2012 - June 2014 (2 years)
Vietnam

Aricent
Senior Software Engineer
August 2010 - July 2012 (2 years)

I am the key member of BTS (base transceiver station) Software

Metran Co., Ltd.
Embedded Software Engineer
May 2008 - August 2010 (2 years 4 months)

Education

Ho Chi Minh University of Technology
Engineer's degree, Mechantronics · (2002 - 2007)

University Of Economics Ho Chi Minh City
Bachelor's degree, Finance, General · (2009 - 2011)