# Nguyen Hoang Khang

## AI Engineer

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Github • Orcid • Google Scholar

Facebook • Apr 2003

## 👤 PROFILE

After diligently accumulating years of experience as a freelance software engineer from 2017 to 2022, I have been an AI engineer at the Autonomous Vehicle Research Lab at FPT Can Tho University since 2022, where I develop and research lightweight deep learning models. I have also achieved significant research milestones, with multiple publications showcasing improvements and practical applications in various scientific conferences and journals.

## 💼 PROFESSIONAL EXPERIENCE

**AI Engineer**
2022 – Present | Cantho, Vietnam
Developing an autonomous vehicle system simulated on Ros2

**Freelance .Net programmer**
Jul 2023 – Sep 2023 | Can Tho, Vietnam
Tham gia phát triển website FCBEM cùng đội ngũ phát triển của FPT Software theo yêu cầu của FPTU

**Chrome Extension Developer** ⎆
Mar 2023 – Jun 2023 | Can Tho, Vietnam
Phát triển và phát hành công cụ chấm điểm tự động trên chrome store, tiếp cận hơn 1000 người dùng vào tháng 6 năm 2023

## 🌐 LANGUAGES

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|---|---|
| English | ●●●○○ |
| Japanese | ●●○○○ |
| Vietnamese | ●●●●○ |

## 🎯 INTERESTS

- AI research
- AI system integration
- Automation System

## 📖 PUBLICATIONS

**An Improved Lane-Keeping Controller for Autonomous Vehicles Leveraging an Integrated CNN-LSTM Approach**
International Journal of Advanced Computer Science and Applications
2023
https://dl.acm.org/doi/abs/10.1145/3591569.3591589

**Traffic Lights Detection and Recognition Method using Deep Learning with Improved YOLOv5 for Autonomous Vehicle in ROS2**
Proceedings of the 2023 8th International Conference on Intelligent Information Technology
24 Feb 2023
https://doi.org/10.1145/3591569.3591589

**Lane Road Segmentation Based on Improved UNet Architecture for Autonomous Driving**
International Journal of Advanced Computer Science and Applications
2023
https://dx.doi.org/10.14569/IJACSA.2023.0140724

**Optimizing YOLO Performance for Traffic Light Detection and End-to-End Steering Control for Autonomous Vehicles in Gazebo-ROS2**
International Journal of Advanced Computer Science and Applications
2023
https://dx.doi.org/10.14569/IJACSA.2023.0140752

**Combining Contrast Limited Adaptive Histogram Equalization and Canny's Algorithm for the Problem of Counting Seeds on Rice**
Information Systems for Intelligent Systems: Proceedings of ISBM 2022
2023
https://link.springer.com/chapter/10.1007/978-981-19-7447-2_50

**Combining Autoencoder and Yolov6 Model for Classification and Disease Detection in Chickens**
Proceedings of the 2023 8th International Conference on Intelligent Information Technology
2023
https://dl.acm.org/doi/abs/10.1145/3591569.3591591

## 🏅 ADWARDS

**Consolation Prize at FPT EDU DIGITAL RACE 2023** ⎆

**First prize for students atthe final of the green startup creative talent contest 2022** ⎆

**Top 5 Aura Hackathons organized by FPT Sotfware 2022** ⎆

## 🎤 CONFERENCE

**World Conference on Information Systems for Business Management**
2022 | Bangkok, Thailand

**Attend the 2023 8th International Conference on Intelligent Information Technology**
2023 | Danang, Vietnam

## 🧠 KNOWLEDGE

- Python, Java, C/C++, C#, Javascript, Golang, PHP, HTML/CSS,...
- Ros, Ros2, OpenCV, Tensorflow, Keras, Numpy, Pytorch, Flask, Django, Asyncio, Scikit-learn, Matplotlib, .Net7, MongoDB, SQL Server, Nodejs, Reactjs, ...

## 🎓 EDUCATION

**Software Engineering**
FPT University
Sep 2021 – Apr 2025 | Can Tho, Vietnam