

Nguyen Hoang Khang

AI Engineer



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Github • Orcid • Google Scholar

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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 | Cantho, Vietnam
Participate in developing FCBEM website with FPT Software's development team according to FPTU's requirements

Chrome Extension Developer

Mar 2023 – Jun 2023 | Cantho, Vietnam
Develop and release automatic scoring tool on chrome store, reaching more than 1000 users by June 2023

LANGUAGES

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>

AWARDS

- Consolation prize at FPT EDU DIGITAL RACE 2023
- First prize for students at the final of the green startup creative talent contest 2022
- Top 5 Aura Hackathons organized by FPT Software 2022

CONFERENCE

- World Conference on Information Systems for Business Management 2022 | Bangkok, Thailand
- Attend the 2023 8th International Conference on Intelligent Information Technology 2023 | Da Nang, 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