Binh Nguyen Le Nguyen

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Education	HCM International University – Vietnam National University (VNU)	2019 – 2024
	Computer Science	
	A Computer Science graduate with a passion for backend development, excelling in tackling complex challenges and consistently delivering innovative solutions with determination and expertise.	
Work Experience	 Backend Developer & AloT Researcher at AloT Lab VN Reference: https://aiotlab.vn/ Conduct research on advanced laboratory projects, contributing to the development and publication of scientific papers in leading national and international conferences and journals. Actively engage in academic competitions, proposing innovative solutions such as Vehicle Detection and Optical Mathematical Character Recognition, etc. utilizing Arduino, ESP microcontrollers, and developing Web and Mobile applications integrated with Machine Learning and Deep Learning techniques. Teaching Assistant for the Internet of Things Lab Course at HCM International University. Member of Google Developer Student Club - the Faculty of Academic 	August 2023 – Now 09/2023 – 12/2023 07/2022 – 07/2023
	at HCM International University.	07/2022 07/2023
	- Internship Back-end Developer at The Ark Studio	07/2022 – 10/2022
Drojects	HCM International University - Real-time Air Quality Monitoring and	Anril 2024

Projects

HCM International University – Real-time Air Quality Monitoring and Forecasting System using Fog Computing Technology

April 2024

Graduate Project

- Built a real-time system using performance microcontroller with environmental sensors.
- Developed the web interface for interacting with the data collection.
 - o Deployment: https://www.aiair-aiotlabvn.tech/
- Developed the mobile application with open-source map to track the air quality stations.
 - Deployment: https://play.google.com/store/apps/details?id=com.aiotlabvn.iu air quality
- Integrated the air quality monitoring system on Zalo Mini App platform.
- Using several Machine Learning algorithms and building hybrid model for forecasting feature.
- Technologies used: ReactJS, Flutter, OpenStreetMap, Flask, ThingsBoard, Machine Learning.

HCM International University – AloT Smart Parking System

April – May 2023

FullStack Developer

- Developed feature for detecting license plates and recognizing human face.
- Built mobile application for user to interact with the smart parking system.
- Used the Firebase application for storing user information collected from the system.
- Project: https://github.com/Nguyenle23/Internet-of-Things-Project
- Technologies used: ReactJS, Flask, Flutter, Firebase Firestore, Cloudinary, OpenCV OCR.

HCM International University – Stocking Microservices

April - May 2023

Back – end Developer

- Built authentication feature for participating in stocking website.
- Developed the user interface for authentication feature and dashboard.
- Project: https://github.com/Nguyenle23/Stocking-Microservices
- Technologies used: ReactJS, Go, LoopBack4, PostgreSQL.

Back – end Developer

- Built authentication, user profile, chat feature using Websocket technology.
- Project: https://github.com/Nguyenle23/Petties-GDSC
- Technologies used: Flutter, NodeJS, Go, Firebase Firestore, Firebase Storage.

HCM International University – Netflix Clone Website

June 2022

Back – end Developer

- Built full features for streaming video with a cloud storage computing.
- Developed authentication and user profile feature authorized with email.
- Applied the third-party API to develop the payment feature.
- Project: https://github.com/Nguyenle23/WAD-Project-Course
- Technologies used: ReactJS, NodeJS, MongoDB, ExpressJS, Nodemailer, Cloudinary

Honors –
Awards

- Selected as One of the Top 13 Teams in IT Hackathon 2024: Solana Consumer Hack organized by the Faculty of Information Technology -HCM International University.

June 2024

- Top 4 Outstanding Teams in the Southern Vietnam Region of GDSC Hackathon 2024.

February 2024

- Final round of Digitrans Smart City competition 2023.

November 2023 September 2023

- Scholarship to attend Summer School on "Modern Machine Learning: Theoretical Foundations and Applications 2023".

May 2023

- Won 1st prize at the Scientific Conference "Digital transformation for young people - Solutions and applications 2023".

- Final round of Google Developer Student Club Hackathon Vietnam 2023

March 2023

- Won 1st prize of IT Hackathon 2022 organized by the Faculty of Information Technology – HCM International University.

July 2022

Publications • Journal Articles

March 2023

- Nguyen Binh Nguyen Le, Nam Anh Dang Nguyen, Phuc Khang Nguyen, Duy Tan Le, Kim Anh Dao, Quynh Mai Le Thi, Dang Quang Nguyen: Zalo Mini App - International University Youth Union: Effective Information Connection for Union Members and Youth. TNU Journal of Science and Technology.
- International and Domestic Conferences

- Nguyen Binh Nguyen Le, Tan Duy Le, Nhat Minh Quang Truong,

October 2023

Huynh Phuong Thanh Nguyen, Kha Tu Huynh: Real-Time Air Quality Monitoring System Using Fog Computing Technology, the 2nd International Conference on Intelligence of Things 2023 (ICIT 2023).

December 2023

- Nguyen Binh Nguyen Le, Hoang Thinh Tran, Nguyen Nam Anh Dang, Duy Tan Le. (2023). Driving Change in Waste Management: Harnessing Mobility for Sustainability. The 4th Scientific Conference for Research Students 2023 at International University - VNUHCM.

September 2023

- Nguyen Binh Nguyen Le, Nam Anh Dang Nguyen, Duc Dang Khoi Nguyen, Le Duy Tan: AloT System for Real-Time Air Quality Monitoring and Forecasting (Vietnamese). The 16th National Conference on Basic Research and Application of Information Technology (FAIR 2023).

Skills

Hard skills: JavaScript, NodeJS, ReactJS, MongoDB, Firebase, PostgreSQL, Flutter, Python, Flask, Tensorflow. Languages: native in Vietnamese, fluent in English (IELTS: 6.0).