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Summary

I aspire to teach and inspire students in Artificial Intelligence (AI) and STEM education. I have experience in designing curricula, delivering classes, and guiding hands-on projects using tools such as Teachable Machine, mBlock, and uBlock, as well as developing robotics and IoT projects. My goal is to create an engaging and practical learning environment that fosters creativity, curiosity, and a passion for technology among students.

Education

University of Information Technology, Vietnam National University – HCM City *Dec 2025 – Present*
Master of Computer Science

- Specialization: Natural Language Processing (NLP)
- Research direction: Language models and Generative AI

Saigon University *2018 – 2023*
Engineer in Information Technology (High-Quality Program)

- Studied Data Structures, Algorithms, Software Engineering
- Completed projects in Web Development, Mobile, and Backend Development
- Degree Classification: Very Good

Experience

AILAB – Saigon International University *Ho Chi Minh City*
2023 – Present

AI & STEM Teacher

- Designed and authored AI teaching materials tailored for elementary and secondary school students.
- Taught extracurricular AI & STEM classes at The Asian International School (IPS, AHS).
- Guided students to explore AI through interactive tools such as Teachable Machine, mBlock, uBlock, Arduino, and beginner-friendly IoT projects.
- Introduced robotics and embedded systems (Jetson Nano, Raspberry Pi) through simple applications, and developed basic projects (e.g., line-following robot) to make AI concepts tangible.

AI Engineer

- Developed two Q&A chatbots for university admission deployed on SIUBOT and AILAB's website.
- Built NLU pipeline for Vietnamese question classification and answer retrieval.
- Integrated real-time data sources for up-to-date responses.
- Improved conversation flow and reduced response latency.

Saigon University *Ho Chi Minh City*
Sep 2018 – May 2023

AI/ML Student Researcher

- Built and trained ML models (LSTM, CNN, few-shot learning) for speech and image tasks.
- Applied signal processing techniques to noisy heart sound data.
- Developed an algebra solver tool using Matlab.
- Created web/mobile apps with Java, SQL, and Flutter in coursework.

Projects

Q&A Chatbot for University Admission *Mar 2025 – Present*

- Developed two Vietnamese-language chatbots for university admission, deployed on SIUBOT and AILAB website
- Built a full NLU pipeline with question classification and answer retrieval
- Integrated Retrieval-Augmented Generation (RAG) to enhance answer quality
- Tools Used: Python, Rasa, Firebase, REST API, RAG

Emotion Recognition with Teachable Machine (Elementary School Project) *2024 – 2025*

- Created an interactive project for elementary students to build a simple emotion recognition model using Google Teachable Machine
- Guided students to collect their own facial expression data and train the model directly on the tool, making AI concepts fun and accessible
- Tools Used: Teachable Machine, Webcam

Arduino Uno Line-Following Robot (Secondary School Project) *2023 – Present*

- Designed a line-following robot project using Arduino Uno and IR sensors for secondary school STEM classes
- Guided students to assemble the hardware and program the robot with mBlock code, helping them learn robotics and control systems in a visual, block-based way
- Tools Used: mBlock, Arduino Uno, IR Sensors, Motor Driver

Heart Rate Estimation from Heart Sounds *Sep 2022 – May 2022*

- Applied signal processing and filtering to extract features from heart sound recordings
- Built an LSTM model to estimate heart rate from audio input
- Tools Used: Python, Librosa, TensorFlow

Handwritten Character Recognition *Feb 2022 – May 2022*

- Recognized handwritten English characters using a CNN-based classifier
- Compared with few-shot learning to address small dataset limitations
- Tools Used: Python, OpenCV, Keras

Matlab Application for Algebraic Problem Solving *Sep 2019 – May 2020*

- Developed a desktop tool to solve matrix operations and algebraic equations
- Implemented LU decomposition, matrix inverse, and system solver
- Tools Used: Matlab

Technologies

Programming Languages: Python, Java, C++, SQL, Dart, Matlab

AI/ML Frameworks: TensorFlow, PyTorch, Keras, Rasa, Firebase, REST API, OpenCV, Git

STEM & Teaching Tools: Teachable Machine, mBlock, uBlock, Arduino IDE, Raspberry Pi, Jetson Nano, ROS, IoT Platforms

AI Tools: Gemini, ChatGPT, Copilot, Bing Image Creator, NotebookLM, etc.

Other Skills: English (B1 - good comprehension of the language), Microsoft Office (Word, Excel, PowerPoint), Google Workspace, Canva, LaTeX