

Hiep Tan To

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Bachelor's student at Ho Chi Minh University of Science, focusing on software engineering, OOP, data structures, and algorithms. Actively engaged in scientific research, which led to a conference publication and strengthened my analytical, critical thinking, and problem-solving skills.

Education

Bachelor of Technology with Honors	9.41/10.0
Computer Science and Engineering, University of Science - VNUHCM	2025
Thesis	10.0/10.0
Generative AI-Based Virtual KOL System	2025

Language Skills IELTS 6.0, VSTEP B2

Technical and Soft Skills

- **Front-End:** HTML-CSS, TailWind, Canvas, Figma, React.js
- **Back-End:** Express.js, C#, Python Django, Java, Ruby, C++
- **Database:** Microsoft SQL Server, MongoDB, PostgreSQL
- **Other tools:** Overleaf
- **Strong presentation skills, Collaboration skills**

Internships and Experience

Associate Machine Learning Engineer

DeepCDR Team, OPSWAT

Jul. 2025 - Present

- Developing and proposing the AI for file type detection.
- Designing and training classification models on large-scale file datasets to improve detection accuracy.
- Evaluating model performance using precision, recall, and F1-score metrics across various file types.
- Collaborating with cybersecurity experts to align ML models with threat detection requirements.
- Optimizing model inference for integration into OPSWAT's production pipeline with minimal latency.
- Conducting research and benchmarking on traditional and deep learning approaches for file analysis.

Undergraduate Thesis: Generative AI-Based Virtual KOL System

Guide: Dr. Le Trung Nghia, Assoc.Prof. Tran Minh Triet, University Of Science

Sept. 2025

- Developed a generative AI system merging identity with varied styles, preserving semantics.
- Built a modular, extensible architecture to integrate new algorithms and custom pipelines easily.

Undergraduate Research

Software Engineering Laboratory, University of Science

Sept. 2023 – Present

- Engaged in a research-focused academic club under faculty mentorship.
- Studied Generative AI techniques such as Stable Diffusion and GANs.
- Participated in collaborative research and technical discussions.
- Contributed to scientific research projects in the field of Generative AI.

Contractor Software Engineering - Treasure Data

Integration Team, Treasure Data

Apr–Jun 2024

- Developing and maintaining connectors for the Integration team using Embulk with Treasure Data solutions.
- Collaborating with cross-functional teams to design and optimize data pipelines for robust migration and consistency, implementing and refining ETL processes, troubleshooting issues, and enhancing system performance.
- Streamlining data integration workflows to support business intelligence initiatives.
- Assisting in developing a new AI agent for summarizing documents.
- Improved the application to facilitate CLI manual testing for QA.

Scholastic Achievements

- Awarded **Outstanding Student in Scientific Research Achievement** (2023)
- Honored in the **Top 100 Outstanding Students of Vietnam National University** (2023)
- Ranked **1st Best Student of Regular Program, Faculty of IT** (2021)
- Selected among **Top 5 Students** of the Faculty of IT (2021)
- Won **Third Prize** – Provincial Competition for Excellent Students in Informatics (2020)

Key Academic Projects

Embulk Input Marketo Plugin (Ruby, Embulk, Marketo REST API)

Role: Contributor — Open-source Developer

2024

- Contributed to an open-source Embulk plugin enabling data ingestion from Marketo using REST API.
- Improved support for bulk extraction of Leads, Activities, Campaigns, and Program Members with incremental ingestion.
- Collaborated on enhancing configuration parameters (batch size, polling interval, incremental filters) for scalability and reliability.
- GitHub: [embulk-input-marketo](#)

Love Cook (React.js, Node.js, MongoDB, Express.js)

Team size: 5 — Role: Fullstack Developer, Project Manager

Nov. 2023

- Developed a recipe-sharing web application as part of Introduction to Software Engineering course.
- Gained hands-on experience with React.js, Node.js, Express.js, backend databases, and APIs.
- GitHub: [IntroSE_21TN](#)

Remote Control PC (Java, Socket Programming)

Team size: 6 — Role: Developer, Project Manager

May 2022

- Built an application to remotely control a PC (process listing, app listing, screenshots, shutdown/restart).
- Applied socket programming and Java toolkits in a team project for Computer Networking course.
- GitHub: [Remote_Control](#)

Chess Game (C/C++, SFML Library)

Team size: 5 — Role: Developer, Project Manager

Aug. 2022

- Developed a two-player chess game application for the Object-Oriented Programming course.
- Implemented game logic and user interface with SFML.
- GitHub: [Chess_OOP](#)

Research Paper: Budget-aware Road Semantic Segmentation in Unseen Foggy Scenes

Team size: 3

Aug. 2023

- Proposed cost-effective methods to improve autonomous driving in foggy conditions.
- Published and presented at RIVF'23 International Conference.
- Paper link: [IEEE Xplore](#)

Streamlining Virtual KOL Generation Through Modular Generative AI Architecture

Team size: 2

Aug. 2025

- Proposed a system for developing a virtual KOL, called GenKOL, which offers an efficient and scalable way to promote products and services
- Published and presented at ACM MultiMedia 25.

Additional Certificates

Completed FPT AI Compass

Completed AWS Academy Cloud Foundations

Completed Intro to Machine Learning (Kaggle)

Completed Unsupervised Learning, Recommenders, Reinforcement Learning (Coursera)

Completed Advanced Learning Algorithms (Coursera)

Completed Machine Learning Explainability (Kaggle) and Machine Learning Specialization (Coursera)

Completed Ultimate AWS Certified AI Practitioner AIF-C01 and AWS Certified Developer Associate - Theory + Hands-On + Exam