

# 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

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

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- 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

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### 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

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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**