YANG TUẤN ANH

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EDUCATION

VNUHCM - University of Science, Ho Chi Minh City, VN .... **Oct 2021 – May 2025**

GPA: 3.82 (Major: 3.89)

- Bachelors of Science – Advanced Program in Computer Science
- *Relevant coursework*: OOP, Data Structures & Algorithms, Computer Systems Programming, Database Systems, Software Engineering, Multivariable Calculus, Linear Algebra, Statistics, Discrete Structures, Logical Structures, General Physics, Communications Management, Scientific Method, Ethics in Technology, Operating Systems, Computer Graphics, System Design, Principles of Programming Languages, Computational Finance,
- *Honors*: Top-10 GPA Academic Merit Scholarship for Semester 3 of 2021-2022

National University of Singapore, Singapore .... **Aug – Dec 2023**

- Non-graduation, School of Computing
- *Relevant coursework*: Theory of Computation, Computer Vision, Design & Analysis of Algorithms, Intro to Information Security
- *Honors*: Top 10 Southeast Asian student candidates for the NUS ASEAN Master's Scholarship

Kyoto Institute of Technology, Kyoto, Japan .... **Jan – Feb 2023**

- Faculty of Information and Human Sciences
- *Revelant coursework*: Deep Insight in Industrial IoT (IioT)
- Honors: 1 of 3 HCMUS representatives for the student exchange among South East Asia to attend KIT's Japan Online Spring School 2023, understanding intercultural differences and strengthening ties between HCMUS and KIT

VNUHCM - High School for the Gifted, Ho Chi Minh City, VN **2018-2021**

Tran Dai Nghia High School for the Gifted, Ho Chi Minh City, VN **2014-2018**

EXPERIENCE

Autonomous Inc | AI Engineer Intern, Ho Chi Minh City .... **Dec 2023 - Ongoing**

- Enhanced a deep learning library, transforming Keras models into Solidity for seamless blockchain integration.
- Developed advanced layers, significantly boosting the library's functionality and adaptability.
- Deployed AI models on-chain, ensuring optimal performance and robust security.

CinnamonAI | Apprentice, Ho Chi Minh City .... **Jun - Sep 2023**

- Studied AI Research and Deployment in an industrial context, gained knowledge in Git, AWS, Docker, Data version control, model and algorithmic optimization, API deployment, Natural Language Processing, Computer Vision
- Completed the bootcamp with "Translation and Layout Retention of Original PDFs" and ranked 2nd best project
- Utilized NextJS, Django, PostgreSQL, Firebase, AWS to host and serve the model with user experience in mind.

Autonomous Inc | Software Engineer Intern, Ho Chi Minh City .... **Jun – Jul 2023**

- Researched generative algorithms such as Perlin noise, cellular automatas, fractals and computational geometry
- Worked on a generative art collection on terrain map generation, as part of contribution towards https://generative.xyz/
- Learned and utilized P5.js and WebGL to build and design generative art models

LEAN Platform | Software Engineer, Remote .... **Jun 2022 – Mar 2023**

- Engineered alongside an MVP, ranked top 4 in global and top 3 in local startup competitons, setting the foundation for product launch and creating direct study engagement for more than 1000 youths (https://app.lean.social/)
- Assisted in data collecting and sampling for the webapp's machine Learning model – Study drowsiness detection
- Learned and utilized NextJS, TailwindCSS, Mobx to build study streaming tools and controls for Lean Social webapp

STEAM for Vietnam | Teaching Assistant, Remote .... **Feb 2022 – Ongoing**

- Managed interns for STEAM For Vietnam's Summer Internship Program – a 2-month program on technological soft skills, insights into the tech industry and developing projects in groups, which sets opportunities for professional growth
- Generated and initiated ideas for future class curriculums, on Basic CS in Python, and Game Development on Pygame
- Operated technical sites for live classes, ensuring a smooth and effective experience for students and instructors

Tiki Company Limited | Software Engineering Intern, Ho Chi Minh City .... **Jul– Sep 2022**

- Developed demo applications for various components as demonstration for Tini App – a JS Framework by Tiki
- Collaborated in a cross-functional team of 6 engineers to develop software for third-party investors
- Learned and utilized React, NextJS, Typescript and NodeJS to contribute development in Tini App

LEADERSHIP & ACTIVITIES

VNUHCM-University of Science | Ho Chi Minh City, VN   (Oct 2021 – Ongoing)
- **SAB Academy** | Development Team Leader **&** Event Operation member
- **Google Developer Student Club – HCMUS** | Backend Specialist
- **Design ITUS** | Graphic Design Member - Academic Club of Design, Faculty of IT (Nov 2021- Oct 2023)
- **Mùa Hè Xanh campaign** | Ong Nghiên Cứu team – IT-Electronics subteam, creating and developing projects and lectures about Computer Science related topics to students around HCMC (Jun – Jul 2022)
- **Xuân Tình Nguyện campaign** | Ong Nghiên Cứu team – Toán-Tin subteam, creating and developing projects and lectures about Computer Science related topics to students around HCMC (Jan 2024)

- **ProjectX** – Mentorship & Operation, Tech & Product Associate – a non-profit fellowship program to connect tech startups with the best talents and offer mentorship, career orientations, and technical/soft-skills training through events/workshops and building communities for high-caliber students (Nov 2023 - Ongoing)
- **Hanoi Math Modelling Competition** – Research Department – a national-scale project on research and development of mathematical applications for high school students, including competitions and lectures, running since 2015 and with 11.000 followers on Facebook (May 2022 – Ongoing)

PUBLICATIONS & APPEARANCES

- "Optimizing Sperm Detection and Tracking in Fluids with Equalize Class Representation Augmentation", MediaEval workshop, MMM 2024, Jan 2024 (Distinctive Mention Award)
  *Trong-Hieu Nguyen-Mau, Quoc-Huy Trinh, Ngoc-Linh Nguyen-Ha, Tuong-Vy Truong-Thuy, **Tuan-Anh Yang**, Hai-Dang Nguyen, Ngoc-Thao Nguyen, Minh-Triet Tran*
- "Deep Learning Hierarchical Methods for Insect Pest Recognition on Plants", SoICT 2023, Oct 2023
  *Tuong-Nghiep Diep, Thien-Phuc Tran, **Tuan-Anh Yang**, Vinh-Phat Ho-Ngoc*
- "Sketch-based 3D Animal Fine-Grained Retrieval (SketchANIMAR)", Computers & Graphics, Jul 2023
  *Trung-Nghia Le, Tam V. Nguyen, Minh-Quan Le, Trong-Thuan Nguyen, Viet-Tham Huynh, Trong-Le Do, Khanh-Duy Le, Mai-Khiem Tran, Nhat Hoang-Xuan, Thang-Long Nguyen-Ho, Vinh-Tiep Nguyen, ..., **Tuan-Anh Yang**, ..., Akihiro Sugimoto, Minh-Triet Tran*
- "Text-based 3D Animal Fine-Grained Retrieval (TextANIMAR)", Computers & Graphics, Jul 2023
  *Trung-Nghia Le, Tam V. Nguyen, Minh-Quan Le, Trong-Thuan Nguyen, Viet-Tham Huynh, Trong-Le Do, Khanh-Duy Le, Mai-Khiem Tran, Nhat Hoang-Xuan, Thang-Long Nguyen-Ho, Vinh-Tiep Nguyen, ..., **Tuan-Anh Yang**, ..., Akihiro Sugimoto, Minh-Triet Tran*
- "Gamified solution to enhance students' interest in History - Immersion Learning and Gamification", International Science Student Forum – HCMC 2022, Nov 2022 (Best Paper Award)

TECHNICAL PROJECTS

MnemeAI Smart Note Assistant - AI Developer   Mar – May 2024
- A web application designed to assist users with note-taking, task management, and calendar integration.
- Integrated LLMs and Retrieval-Augmented Generation (RAG) from pgvector to process user inputs, generate relevant outputs, and retrieve information from the knowledge base, served from Notion's API.
- Deployed a CI/CD Pipeline with AWS EC2 and Docker containerization, ensuring production-ready stability.

SNORD - Backend Developer   Mar – May 2024
- An electronic cigarette solution empowering users to seamlessly monitor and regulate their smoking habits through innovative hardware and a user-friendly mobile application..
- Designed API endpoints using Golang and Firebase for device access and statistical processing.
- Deployed a CI/CD Pipeline with GCP Compute Engine and Docker, ensuring production-ready stability.

FoodFeed - Backend Developer   Sep – Nov 2023
- An Android app that can help people share food locations and help them make reasonable decisions for their eating.
- Designed API endpoints using Django, PostgreSQL, S3 and Redis on social media features such as user authentication and post CRUD, query and manipulating food and shop data based on fuzzy matching algorithms and geolocation.
- Deployed a CI/CD Pipeline with AWS EC2 and Docker containerization, ensuring production-ready stability.

Clip The Trigger: YOLO-CLIP for Gunpoint Gaze – Computer Vision Engineer   Sep – Nov 2023
- NUS CS4243 project to solve weapon presence binary classification - received 9.75/10 for Methodology & Results

- Developed a YOLOv8 - CLIP ensemble, with a novel data augmentation technique for equalizing class representation
- Applied PyTorch, OpenCV, LabelStudio, HuggingFace Transformers, Ultralytics to experiment and implement models

5tasy – ML Engineer   **Aug – Sep 2023**
- Translates a .pdf file, preserving the original layout of that .pdf file using MaskRCNN, and EasyOCR for tabular format detection, and envit5-translation for file translation.. Achieved Second Prize of the Cinnamon AI Bootcamp 2023.
- Developed the Frontend with NextJS and TailwindCSS, and served inference via Django, Firebase and PostgreSQL.
- Deployed a CI/CD Pipeline with AWS EC2 and Docker containerization, ensuring production-ready stability

MyThorch – Fullstack Web Developer   **Mar 2023**
- Top 4 Finalist submission to the OpenAI Stack Hackathon - a document interaction app that leverages user behavior. Constant data collection helps to adapt to the user's needs for a personalized experience.
- Used React for the frontend and Flask for the backend, GPT-3 generates personalized documents based on user focus, while Redis stores previous interactions to reduce token input.

Trassify - Mobile Developer   **Nov 2022**
- Third place submission to VNUHCM University of Information Technology's Game UIT Hackathon, hosted by the Software Engineering faculty - a recyclable trash detection app, with monetized incentives to encourage recycling.
- Trained a VGG-16 model to classify recyclable trash types, and developed a functional user interface and execute trash classification via phone camera.
- Utilized Flutter and Tensorflow Lite in project development, with Github for project mangement.

COMPETITIONS & AWARDS

Top 15/500 – GDSC Hackathon Vietnam - Hackathon	**Feb 2024**
Top 25/200 – Da Nang Code League, Regular Track – Competitive Programing	**May 2024**
Outstanding Award - SIMIODE Challenge Using Differential Equation Modelling (SCUDEM)	**Dec 2023**
Silver Medal (Top 5%) - International Youth Mathematics Competition 2023 – Maths Olympiad	**Nov 2023**
Top 5/7000 - Redis Side Quest, Lablab.ai - Hackathon	**June 2023**
Scholarship - NUS ASEAN Master's Scholarship – Scholarship	**May 2023**
Top 4/7000 - OpenAI Stack Hackathon, Lablab.ai – Hackathon	**Mar 2023**
Scholarship - MindX Global Developer Scholarship Program, Gen 7 of 2023 – Scholarship	**Jan 2023**
Best Paper - International Student Science Forum, Ho Chi Minh City, 2022 – Conference	**Nov 2022**
Third Place out of 300, GameUIT Hackathon, VNUHCM UIT – Hackathon	**Nov 2022**
Silver Medal (Top 10%) - International Youth Mathematics Competition 2022 – Maths Olympiad	**Dec 2022**
Third Place out of 30, International University's IT Hackathon, GDSC HCMIU – Hackathon	**Jul 2022**
Top 30 semi-finalist, Tiki Hacking Trail 2022, Tiki – Hackathon	**Jun – Jul 2022**
First Place - Engaholic English Competition, BEE Club HCMUS – English competition	**Apr – May 2022**
Regional finalist, High School Youth IT Competition (Tin học trẻ) – Informatics Olympiad	**Apr – Dec 2021**
Finalist, Hanoi Mathematical Modelling Contest 2021 – Mathematical Modelling	**Aug – Nov 2021**
Qualifier, ICPC Vietnam Southern Round – Informatics Olympiad	**Dec 2021**
Third place, HSG Regional Round in Computer Science – Informatics Olympiad	**May 2018**

SKILLS

Programming Languages: C/C++, Python, Java, SQL, Dart, JavaScript, TypeScript, LaTeX, Markdown, Golang, Solidity
Frameworks/Tools: TailwindCSS, NextJS, Express, Flask, Django, Fiber, PostgreSQL, S3, Firebase, MongoDB, Redis, Tensorflow, Pytorch, Keras, Flutter, Android Studio, Jetpack Compose, Docker, AWS, GCP
Languages: English (fluent, 7.5 IELTS), Vietnamese (native speaker), Chinese (beginner)