

Tu Phan

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EDUCATION & CERTIFICATES

Barça Innovation Hub: Introduction to Sports Analytics	<i>February 2025 - Ongoing 2025</i>
Wearable Technology	Grade: 100/100
Art of Communicating The Data	Grade: 88/100
Google Project Management	<i>March 2025 - April 2025</i>
Foundations of Project Management	Grade: 97.27%
Project Initiation: Starting a Successful Project	Grade: 99.57%
Project Planning: Putting It All Together	Grade: 99.50%
Project Execution: Running the Project	Grade: 98.88%
Agile Project Management	Grade: 94.50%
Capstone: Applying Project Management in the Real World	Grade: 96.25%
Ho Chi Minh City University of Technology	<i>September 2012 - April 2017</i>
BE in Computer Engineering	GPA: 7.75/10
Thesis: <i>Predicting Bitcoin Price by Machine Learning</i>	Grade 9.5/10

PUBLICATIONS & APPEARANCES

- Jacob Creech, Brian Friel, and Tu Phan. *Solana Cookbook*. Solana Foundation, 2022. URL: <https://solanacookbook.com/vi>
- Duc-Phu Nguyen et al. “Deep Hybrid Models for Forecasting Stock Midprices from the High-Frequency Limit Order Book”. In: *Future Data and Security Engineering. Big Data, Security and Privacy, Smart City and Industry 4.0 Applications*. Ed. by Tran Khanh Dang, Josef Küng, and Tai M. Chung. Singapore: Springer Nature Singapore, 2022, pp. 393–406. ISBN: 978-981-19-8069-5
- Thang Nguyen-Dinh et al. “A Hierarchical Deterministic Wallet Using Ed25519 Digital Signature Scheme”. In: *Future Data and Security Engineering. Big Data, Security and Privacy, Smart City and Industry 4.0 Applications*. Ed. by Tran Khanh Dang, Josef Küng, and Tai M. Chung. Singapore: Springer Nature Singapore, 2022, pp. 240–257. ISBN: 978-981-19-8069-5

STUDYING COURSES & BOOKS

- Andrew Ng and Kian Katanforoosh. *CS230 - Deep Learning*. 2019. URL: <https://cs230.stanford.edu/>
- Dan Boneh. *CS155 - Computer and Network Security*. 2019. URL: <https://cs155.stanford.edu>
- Sanjam Garg. *CS276 - Cryptography*. 2014. URL: <https://people.eecs.berkeley.edu/~sanjamg/classes/cs276-fall14/>
- Andrew Ng. *CS229 - Machine Learning*. 2008. URL: <https://see.stanford.edu/Course/CS229>
- Ran Canetti and Ronald L. Rivest. *6.897 - Selected Topics In Cryptography*. 2004. URL: <http://courses.csail.mit.edu/6.897/spring04/materials.html>
- Lawrence C Washington. *Elliptic curves: number theory and cryptography*. CRC press, 2008

HONORS & AWARDS

The Grand Prize	Sui x KuCoin Labs Summer Hackathon, 2023.
The Second Prize	Dora Grant DAO Round 3, 2023.
Honor Grant	Superteam Vietnam Instagrant, 2023.
The Fifth Prize	Solana's Riptide Hackathon, 2022.
The Second Prize	Convergence - Serum & Wormhole Hackathon, 2021.
The Second Prize	Solana's Inaugural Hackathon, 2020.
The Second Prize	Tomochain Hackathon, 2019.
The First Runner-up	State of Chain Hackathon, 2018.
The Consolation Prize	Vietnamese Econometrics and Applications Olympiad for Undergraduate Students, 2017.
The Second Prize	Phu Yen Province Competition in Mathematics for High School Students of 12th Grade, 2012.
The Second Prize	Violympic - Phu Yen Province Internet Competition in Mathematics for Secondary School Students of 9th Grade, 2009.
The Consolation Prize	Phu Yen Province Competition in Mathematics for Secondary School Students of 9th Grade, 2009.

PROFESSIONAL AFFILIATIONS

Visiting Lecturer	Blockchain Enabled Business, RMIT, 2024.
Lecturer	Optimistic Rollup Bootcamp, 2024.
Speaker	Viction Horizons, 2024.
Mentor	Build on Viction, 2023.
Panelist	GM Vietnam, 2023.
Speaker	BUIDL Vietnam, 2023.
Advisor	Solana Vietnam Coding Camp - Season II, 2022.
Advisor	Vietnam Web3 Coding Camp - Season I, 2022.
Mentor	KO (Kambria Online) Hackathon, 2021.
Mentor	Kambria Quiz/Code Challenge Series, 2020.
Mentor	#1 Vietnam Blockathon, 2017.

EMPLOYMENT

DevRel Lead April 2024 - December 2024

Ninety Eight

- Led the Web3 Indie Vietnam.
- Developed an MPC Federation.

CTO/Founder January 2023 - April 2024

Desig Protocol

- Desig is a blockchain-agnostic multisig solution.
- The protocol uses MPC and ZK to conduct a Threshold Signature Scheme in trustless environments.

CEO/Founder June 2021 - January 2024

Sentre Protocol / Descartes Network

- Sentre Protocol is **an incubation platform** for post-launch projects on Solana, which was **acquired by Ninety Eight** in 2023.

- **3 million USD fundraising** from the leading venture capitalists, namely Coin98 Finance, Fundamental Labs, Gate Labs, Kyros Ventures, Spark Digital Capital.
- The product line ranges from DeFi to PriFi, including some significant brands such as **Project Kylan**, **Lightning Tunnel**, **Balansol**, **InterDAO**, and some others.

Senior Blockchain/AI/ML Developer

February 2018 - June 2021

Kambria & Omhnilabs Vietnam

- Developed **UV Engine**, a web-based editor, to communicate with Ohmni robots for planning and task distribution via ROS.
- Researched and developed a vision-based autonomous navigation, named **Xupr** agent. The agent relies only on RGB-based images to make navigation decisions.
- Built **Following Me**, a system that can track the owner and follow him/her.
- Built **FloorNet** based on the UNet model to segment images into floor and non-floor.
- Proposed **Proof-of-Burn** based on hierarchical deterministic keys. The technique was deployed onto several bridges for cross-chain services, mostly between Ethereum and Binance Chain.
- Developed blockchain applications (e.g., an on-page wallet named **Kambria Wallet**), and secured financial services based on cryptography (e.g. a redeeming service named **Distribution Portal**).
- Designed a protocol named **The Innovation Judge Protocol** in game theory to decentralize the task of judgement.
- Conducted research for a privacy e-voting system based on homomorphic encryption, and mix networks.

R&D Specialist

October 2017 - February 2018

Bacoor Vietnam

- Carried out research on Ethereum's scalability.
- Applied decentralized exchange protocols such as **Lightning Network**, **0x**, **Relay Network**, **Polkadot** and others.

Fullstack Developer

May 2016 - October 2017

Infinity Blockchain Labs

- Integrated the OAuth protocol to **Know-Your-Customers (KYC)** systems.
- Built **AltaPolis**, an exchange service.
- Conducted applications on the distributed pseudo-random number generator, proof of knowledge, and zero-knowledge proof.

SKILLS

Programming Languages:

- **General.** Javascript, Typescript, Python, Rust, Golang.
- **Smartcontract.** Solidity, Rust, Circom.

Project Management:

- **Scrum Agile.** Jira, Notion, Trello.

Frameworks & Libraries:

• Web Application:

- **Frontend.** NextJS, AngularJS, Remix Run, SolidJS, Ant Design, Material UI, Shadcn, DaisyUI, TailwindCSS.
- **Backend.** NodeJS, Deno, NestJS, ExpressJS, HonoJS, Gin, Rocket.rs, Actix.

- **Blockchain:**
 - **Ethereum.** Geth, Truffle, Hardhat, Circom.
 - **Solana.** SPL, Anchor.
- **Distributed/Parallel System.** libp2p, Ray, IPFS.
- **ML/AI.** Tensorflow, PyTorch, PyBullet.
- **Robotics.** Arduino, ROS.
- **Database:**
 - **SQL.** PostgreSQL, MySQL.
 - **NonSQL.** MongoDB, FaunaDB.
 - **ORM.** Mongoose, DrizzleORM, SeaORM.
- **Messaging.** ZeroMQ, RabbitMQ, Kafka, BullMQ.

DevOps:

- **Version Control.** Git.
- **Deployment.** GitHub, Docker, Terraform.
- **Providers.** AWS, Render, Cloudflare, Google Cloud, Fly.io.

Linguistics: Vietnamese (Native language), English (6.0 IELTS, taken in September 2019), Portuguese (Intermediate).

HOBBIES & SOCIAL ACTIVITIES

My hobbies include football, working out, and programming. I am also dedicated to charity activities, such as:

- The Full-moon Night CSE in Tra Vinh province, September 2014.
- The Spring Volunteer Campaign in Ho Chi Minh City, July 2014.
- The Green Summer Volunteer Campaign in Tra Vinh province, January 2014.
- The Full-moon Night CSE in Tra Vinh province, September 2013.

REFERENCES¹

Dr. Nguyen An Khuong

BE Thesis Reviewer, Academic Mentor

Faculty of Computer Science and Engineering,

Ho Chi Minh City University of Technology.

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Nguyen Duc Thai, Ph.D.

BE Thesis Advisor

Head of Department of Computer Systems and Networking,

Faculty of Computer Science and Engineering,

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¹THE LIST IS SORTED IN ALPHABETICAL ORDER.

Dr. Thuc Vu

Former Employer

Co-Founder / CEO of Kambria & Ohmnilabs Vietnam

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