

# PHAM VU THAI MINH

Hanoi, Vietnam | Website: [thaiminhpv.github.io](https://thaiminhpv.github.io) | Phone: (+84) 38 888 8703

Email: [thaiminhpv@gmail.com](mailto:thaiminhpv@gmail.com) | Github: [thaiminhpv](https://github.com/thaiminhpv) | LinkedIn: [thaiminhpv](https://www.linkedin.com/in/thaiminhpv) | Facebook: [thaiminhpv](https://www.facebook.com/thaiminhpv)

## PUBLICATION

• **Pham Vu Thai Minh**, Nguyen Dong Duc Viet, Ngo Tung Son, Bui Ngoc Anh, and Jafreezal Jaafar, "**RelaHash: Deep Hashing With Relative Position**," in IEEE Access, vol. 11, pp. 30094-30108, 2023, doi: 10.1109/ACCESS.2023.3259104.

## AWARDS

• First Prize in the **ChatGPT Hackathon 2023** • Third Prize in the **FPT Research Festival 2023** • First Prize in the **FPT Research Festival 2022** • Third Prize in the **FPT Edu Hackathon 2021** • Third Prize in the **FPT Edu Hackathon 2019**

## EXPERIENCE

**Cốc Cốc Search** *Data Scientist* **Vietnam**  
Feb. 2023 - Present

- Optimized and deployed a custom transformer model on CPU with less than 25ms latency.
- Developed a chatbot that can take multiple actions and implemented on-the-fly safety regulations during streaming responses.
- Developed a retrieval-augmented text generation system, and deployed using Triton inference server on Google Cloud Vertex AI.
- Developed a large-scale newsfeed recommendation system using custom models.
- Reduced overall search latency by 23ms on CPU by implementing custom mixed precision caching to reduce float16 overhead.

**FPT University AI Research Laboratory** *AI Researcher* **Vietnam**  
Feb. 2022 - Feb. 2023

Supervisor: Professor Ngo Tung Son

Project: RelaHash: Deep Hashing with Relative Position • Published source code: <https://github.com/thaiminhpv/RelaHash>

- Discovered and developed a new deep hashing algorithm called Relative Similarity that **establishes new state-of-the-arts** on CIFAR-10 and ImageNet datasets. • Awarded **first prize in the FPT Research Festival 2022**.

## PROJECTS

**EFISS: Efficient Fashion Image Search System** *AI Engineer | DevOps* **Vietnam**  
July. 2022 - Aug. 2023

Supervisor: Professor Ngo Tung Son

- Developed a model pipeline using fine-tuned YOLOv8, RelaHash, and ViT to efficiently retrieve images from Milvus databases.
- Used Apache Beam to batch process 7.5 million images • Set up Kubernetes clusters with CI/CD in a hybrid deployment.

**Doctor's Cyclop** *AI Engineer* **Vietnam**  
Apr. 2021

Supervisor: M.Sc. Nguyen Hai Nam

- Developed a deep learning model that classifies the presence and correct placement of tubes on chest x-rays using UNet++.
- **Top 3 FPT Edu Hackathon 2021: Using AI for image recognition** - beat over 100 teams coming from various Universities.

## ACTIVITIES

**AWS Academy** *Educator | Lecturer Assistant* **Vietnam**  
Sep. 2022

Technical Program Manager: Ji Cheng

- Got selected to become a lecturer assistant at AWS Academy Cloud Training Bootcamp in Vietnam by FUNiX and AWS Academy.
- Directly participated in teaching AWS Cloud Foundations class with over 800 students • AWS Certified Cloud Practitioner by AWS

**JS Club - Japanese Software Engineers** *Lecturer | Technical Specialist* **Vietnam**  
Mar. 2022 - Sep. 2022

- Taught Java Object-Oriented Programming to a class of 15 students for 10 weeks.
- Deployed Bomberman game server in a hybrid deployment for more than 120 competitors.
- Managed a team of 6 people to collaboratively deliver a scalable distributed web app within a month • Set up CI/CD
- Source code: <https://github.com/thaiminhpv/your-js-life>

**Developh Vietnam** *Web Developer* **Vietnam**  
Sep. 2021 - Feb. 2022

- Develop the official website for Developh Vietnam using ReactJS with Gatsby.
- Improved page loading speed significantly by 250% by implementing server-side caching and optimizing images.

**The 80% Project** *Co-founder* **Hanoi, Vietnam**  
Jan. 2020 - Jun. 2021

The 80% Project is a non-profit organization that aims to raise community awareness about inequality between specialized and non-specialized high schools.

## EDUCATION

**FPT University** **Vietnam**  
Jan. 2022 - Aug. 2023

- Major: Software Engineering • Recipient of the 100% Scholarship • GPA: 8.7/10
- Bachelor thesis: EFISS: Efficient Fashion Image Search System - Supervisor: Professor Ngo Tung Son
- Got a perfect score 10 out of 10 for the Bachelor thesis defense.

**FUNiX University** **Vietnam**  
Dec. 2018 - Dec. 2021

- Major: Software Engineering • Merit-based Scholarship in all semesters • Cumulative GPA: 8.7/10

## OTHER SKILLS

- **Languages:** English: **7.0 IELTS** | Vietnamese: native • **Programming languages:** Python, JavaScript, C/C++, Bash, Matlab, SQL
- **Frameworks & libraries:** PyTorch, HuggingFace, LangChain, TensorFlow, Pandas, FastAPI, NodeJS, ReactJS, Cython, TorchServe
- **Other tools:** Unix/Linux, Git/Github, Docker, Terraform, Kubernetes, AWS, GCP, Firebase, Arduino, Vercel, Nginx, DVC