Vu Le

: Hanoi capital region, Vietnam.
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EDUCATION

Vietnam National University, Hanoi (VNU).

Bachelor of Mechatronics and Automation *August 2018 - June 2022*

- Cumulative GPA: 3.43/4.0 (**Top 2 %** in the faculty)
- Bachelor thesis: "Low Illumination Image Enhancement for Night-Time Pedestrian Detection on YOLOv3".
- Relevant projects: Apple defect detection with YOLOv3, Face mask detection, Triplet Attention for increasing performance.

SKILLS

Technical Skills

- **Programming** - Python, Bash scripting, Scala, SQL, Java.
- **Specialized skills** - Deep Learning, Computer Vision, Computer Architecture.
- **Frameworks** - PyTorch, Slurm, TensorRT, Container.
- **Tools & Technology** - Linux servers, LaTex, Git, Emacs Lisp, Networking.

General Skills

- **Languages** - Vietnamese (native), English (IELTS 7.5)

EXPERIENCE

George Mason University FairFax, Virginia, USA

Research Assistant *Sep 2023 - present*

- Doing research on efficient neural human avatar to substantially reduce internet bandwidth for real-time interactive holographic communication with Prof. Han's group.

Markov-AI San Francisco Bay Area

Research Engineer (remote) *Sep 2023 - present*

- Markov-AI is a new startup platform which helps users find the best local events in a given location in quick. I'm responsible for scraping and researching metadata across multiple platforms and pre-process them for a recommendation system. Project manager: Hai Phan.

PhenikaaX Hanoi, Vietnam

AI & FPGA Research Engineer *August 2023 - Oct 2023*

- Designing a full pipeline for taking 4 streams of h264 video from MIPI cameras and feeding them to FPGA DPU for inference for an automatic parking systems.
- Deploying drivable-region segmentation models with Vitis-AI platform on KV260 development board.

Phenikaa University Hanoi, Vietnam

Research Associate *July 2022 - August 2023*

- Conducting research on hand landmark estimation from radar signals to address the limitations of vision models.
- Proposing a novel methods for processing raw data signals, and designing a regression model, achieving 3 % error on pixel level compared to image-based models.

Information Technology Institute (ITI-VNU) Hanoi, Vietnam

Research Intern *August 2020 - May 2022*

- Core member of the joint project between Toshiba Japan and SISLAB-ITI on "CNN Accelerator for hand-written digits recognition".
- Doing research on FPGA accelerator for accelerating CNN operations for DQN.
- Studying about digital design, computer architecture with RTL design and computer organization.

SELECTED ACHIEVEMENTS

- Finalist, Most Creative Prize (second place) at the 2022 IEEE SEACAS Hackathon NTU, Singapore
  Designed a platform for efficiently monitoring trash bin level in different locations in Nanyang Technological University's campus.
- Finalist, Fighting Spirit Prize at the 25th LSI Design Contest in Okinawa 2022, Kyutech, Japan
  Designed a custom computer architecture and instruction set architecture for accelerating CNN operations in FPGA.
- Exchange student in the Sakura Science Program 2021, UEC, Tokyo, Japan
  One among two students in Vietnam National University being selected for this program.
- Exchange student in the TF Scale 2021, Singapore
- Third prize in the 2020 Student-level Scientific Research Conference 2020, UET-VNU
  Won an award for a research project on crack detection algorithms
- Outstanding Youth Face award of UET-VNU 2020, UET-VNU
  Selected as an outstanding youth face of UET based on excellent academic performance
- Merit – based scholarships for top 5% excellent academic students 2020, UET-VNU
  Selected based on excellent academic performance.

RELEVANT COURSEWORKS

University	MATLAB, Micro-controllers, Digital Techniques, C++ programming, Algebra, Calculus.
Open Courses	Computer Organization, Digital Design and Computer Architectures (ETH Zurich), Object Oriented Programming, Generative Adversarial Networks (GANs), Internet Networking.
Coursera	Machine Learning and Deep Learning Specialization on Coursera, Data Structure and Algorithms (Princeton)

PUBLICATIONS

[1]. Cheng, Ruizhi, **Vu Le**, Nan Wu, Eugene Chai, Matteo Varvello, and Bo Han. "MagicStream: Real-time Holographic Telepresence via Semantic Communication." MobiSys (under review)

[2]. Phan, Hai, Cindy Le, **Vu Le**, Yihui He, and Anh Nguyen. "Faster and Interpretable Face Recognition for Out-Of-Distribution Data Using Vision Transformers (ViTs)." In Proceedings of the IEEE/CVF winter conference on applications of computer vision, 2024.