VIET ANH NGUYEN

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Github: github.com/vietanhdev | **LinkedIn:** linkedin.com/in/vietanhdev/ | **Blog:** https://aicurious.io

Skills

Proficient: Computer Vision, Python, C++, OpenCV, Tensorflow, Keras, TensorRT, CMake, Git, Qt.
Familiar: PyTorch, Flask, ReactJS, Electron.
Language: TOEIC 885.

Experience

AI ENGINEER 03/2020 – 10/2020: full-time 09/2019 – 03/2020: part-time	**KAOPIZ SOFTWARE CO., LTD** - Research and develop machine learning and computer vision solutions.
TEACHING ASSISTANT 08/ 2019 – 01/2020	**HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY** - Prepared course content and guided undergraduate students in a Database course.
INTERN 06/2018 – 08/2018	**ARROW TECHNOLOGIES VIETNAM** - Worked on 3D reconstruction from 2D images.

Education

B.SC COMPUTER SCIENCE 2015 – 2020	**HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY** CPA: 3.3.

CERTIFICATIONS:

- **2019: Fundamentals of Deep Learning for Computer Vision – Issued by NVIDIA Deep Learning Institute.**
- **2020: Deep learning Specialization (5 courses) – Issued by Deeplearning.ai at Coursera.**

Projects

(More detail and source code: https://aicurious.io/portfolio/**).**

Developer **@ Advanced driver-assistance system (Graduation Research – Best Presentation Award)**

- **Description:** An advanced driver-assistance system on Jetson Nano embedded computer with four main functions: forward collision warning, lane departure warning, traffic sign recognition and overspeed warning. I trained and optimized three deep neural networks with TensorRT technology for these functions. I also implement a highly efficient pipeline for the system and a touch user interface in C++ Qt.
- **Tech stack:** C++ (user interface and inference code), Python (data processing and training), Qt, ResNet-18, U-Net, CenterNet, Tensorflow, PyTorch, TensorRT.
- **Source code for Jetson Nano:** https://github.com/vietanhdev/car-smart-cam.

Leader - Developer **@ Autonomous Car 2020 (Group Project)**

- **Description:** Self-driving car ROS node in a simulated environment. I worked on the system architecture, semantic segmentation model and car control.
- **Tech stack:** Python, E-Net, U-Net, Faceboxes, Robot Operating System (ROS).
- **Source code:** https://github.com/vietanhdev/autonomous-car-2020.

Developer **@ FaceCam** – A desktop camera app with face decorations and filters.

- **Tech stack:** C++, Qt, OpenCV, face detection and alignment algorithms.
- **Source code:** https://github.com/vietanhdev/facecam.

Developer **@ Deep Head Pose 2**

- **Description:** A modified version of Deep Head Pose model with new backbones (ShuffleNetV2, EfficientNet) and face landmark estimation.
- **Tech stack:** Deep Head Pose (CNN), Tensorflow, Keras.
- **Source code:** https://github.com/vietanhdev/deep-head-pose-2.

Leader - Developer **@ gICT Video Conference (Group Project)**

- **Description:** We implemented a video conference software **from scratch** in client-server architecture: protocol design on UDP, UI design with Qt C++. I was the leader of this project and was responsible for the protocol design, image streaming and desktop application.
- **Tech stack:** UDP, Qt C++, Linux socket.
- **Source code:** https://github.com/vietanhdev/gict-meeting.

Frontend + Backend developer **@ BattleShip (Group Project)**

- **Description:** A realtime online game with chat function.
- **Tech stack**: ReactJS, Flask, SocketIO.

Achievements

07/2020: Best Presentation Award for undergraduate thesis presentation

- Committee: Global ICT No. 1 – SoICT – Hanoi University of Science and Technology.

06/2020: Runner Up - SoICT - IBM Hackathon 2020.

- I led a 4-member team to build a paper streaming solution for remote education. I was responsible for algorithms to capture drawing strokes and handwritten text from a phone camera, filter and create video streaming.
  Video: https://youtu.be/pmRSfHSfrco.

01/2020: The First Prize - FPT's Driverless Car Challenge - University round at Hanoi University of Science and Technology.

- I was the leader of a 3-member team to build self-driving car controlling algorithms in a simulated environment.

09/2017: HUST - SIT Global Project-based Learning Program.

- I received a scholarship for a short-term robot course in Tokyo, Japan, held by Hanoi University of Science and Technology and Shibaura Institute of Technology. In this course, I built a line tracing robot from scratch using a PIC microcontroller. Later, this robot was extended using a Raspberry Pi board to provide voice controlling function.