PERSONAL INFORMATION

Tuan-Anh Bui

- Temasek Lab, SUTD, Room 3.719, 8 Somapah Road, Singapore
- **(+65)** 87415814
- <u>bta1489@gmail.com</u>; <u>tuananh bui@sutd.edu.sq</u>
- tuananhbui89.github.io
- Skype tuananhbui89
- in LinkedIn tuananhbui89

"If you want to live a happy life, tie it to a goal, not to people or things" - Albert Einstein

OBJECTIVE

With strong experience on the industrial environment, I would like to bring a knowledge from academic to the real life through technological products, esp. using AI, Computer Vision to improve daily, common activities, to make the world to be a better place. I realize that pursuing Ph.D. is the must-do path to deepen my knowledge and improve the research methodology for this goal.

RESEARCH BACKGROUND

Generative Adversarial Network, Detection and Tracking Moving Object, Image Retrieval Digital Signal Processing, Audio Processing (Viettel)

EDUCATION

09/2007-06/2012

Hanoi University of Science and Technology, Hanoi, Vietnam (HUST)

BSc in Electronics and Telecommunications, Honour program, Talented class Thesis title: "Research on optimal trade-off between power saving and QoS" Thesis grade: 4/4 (10/10) (Best Thesis Award)

GPA: 8.44/10 (top 5% of SET Students, Merit for Excellent Graduate Student)

08/2004-06/2007

Le Hong Phong Gifted High School, Namdinh, Vietnam

High school Diploma, Physics Talented class

Got a Second prize in National Physics Olympiad for High School Students.

WORKING EXPERIENCE

03/2017 - Present

Research Assistant

Temasek Lab, Singapore University of Technology and Design, Singapore Projects:

- Implemented module to detect and track Undefined Flying Objects, esp. Drone in Sky Surveillance Flying Object Detection (SSFOD) project.
- Improved image retrieval module to handle big dataset (approximate. 200k images) in Urban-area Scene Based Localization (USBL) project.

Research papers:

- Ngoc-Trung Tran, Tuan-Anh Bui, Ngai-Man Cheung, "Generative Adversarial Auto-Encoder Network", Under review ECCV18.
- Ngoc-Trung Tran, Dang-Khoa Le Tan, Anh-Dzung Doan, Thanh-Toan Do, Tuan-Anh Bui, Ngai-Man Cheung, "On-device Scalable Image-based Localization", under submission to Transaction on Image Processing, arXiv:1802.03510.

07/2012 - 03/2017

Digital Signal Processing Engineer

Viettel R&D Institute, Viettel Group, Hanoi, Vietnam

- Developed baseband processing algorithms: Channel equalization using adaptive filter, Adaptive Noise Cancellation, Digital Pre- Distortion to improve the linearity of radio amplifiers.
- Developed auto-control and measuring system for qualification and testing in manufacture.
- Won the internal contest, one of three best projects at Viettel for Developing and Manufacturing Viettel SDR Handheld Radio project, 2016.
- Got a Creative Idea Award at Viettel for Research and Management, 2012-2015.

05/2010 - 06/2012

Research Assistant

Green Networking Lab, Hanoi University of Science and Technology, Vietnam

- Study on Openflow, Software Defined Networking, Traffic engineering, Energy consumption model, data centre network.
- Research on methods for reducing energy consumption in data centre network.
- Got a Third prize on Student Conference on Scientific Research.

HONOURS & AWARDS

- 2016, Top 3, Best project at Viettel.
- 2012-2015, Creative Idea Award for Research and Management at Viettel R&D Institute.
- 2012, Merit for excellent graduate student, HUST.
- 2012, **Best Thesis Award** in Thesis Defence, SET, HUST.
- 2012, Third prize in Student Conference on Scientific Research.
- 2007, Second prize in National Physics Olympiad for High School Students.

REFERENCES

Assistant Professor Ngai-Man Cheung, Ph.D. (Supervisor)

Department of Information Systems Technology and Design Singapore University of Technology and Design E-mail: ngaiman_cheung@sutd.edu.sg

Doctor Thu-Huong Truong, Ph.D. (Supervisor)

School of Electronics and Telecommunications Hanoi University of Science and Technology E-mail: huong.truong@hust.edu.vn

Mr. Hoang Nguyen (Manager)

Institute of Communication and Electronic Warfare Viettel R&D Institute, Viettel Group E-mail: hoangnc1@viettel.com.vn