

BACH-THUAN BUI

+81 804-444-4104 thuan.bb.hust@gmail.com thuanbb.github.io Google Scholar

EDUCATION

DPhil | Information Science and Engineering | GPA 5.0/5.0 Oct. 2022 - Now Ritsumeikan University Osaka, Japan Master of Engineering | Information Science and Engineering | GPA 4.67/5.0 Oct. 2020 – Sep 2022 Ritsumeikan University Shiga, Japan Sep. 2015 – Sep 2019 Bachelor of Engineering | Telecommunications Engineering Hanoi University of Science and Engineering Hanoi, Vietnam

RESEARCH INTERESTS

Computer Vision/Machine Learning/Evolutionary Algorithm. About one year of industry experience developing AI algorithms for face detection and recognition before joining AIS Lab to do research on camera re-localization and mapping using machine learning, which is my recent interest.

SELECTED PUBLICATIONS

- 1. Bach-Thuan Bui, Dinh-Tuan Tran, and Joo-Ho Lee D2S: Representing local descriptors and global scene coordinates for camera relocalization. arXiv preprint, 2023. [Paper | Website | Code]
- 2. Bach-Thuan Bui, Dinh-Tuan Tran, and Joo-Ho Lee Fast and Lightweight Scene Regressor for Camera Relocalization. 16th IEEE/SICE International Symposium on System Integration (SII), 2023. [Paper | Code]
- 3. Bach-Thuan Bui, Dinh-Tuan Tran, and Joo-Ho Lee FeatLoc: Absolute pose regressor for indoor 2D sparse features with simplistic view synthesizing. ISPRS Journal of Photogrammetry and Remote Sensing, 2022. [Paper | Code]
- 4. Bach-Thuan Bui, Linh Ho Manh, Kiem Nguyen Khac, Michele Beccaria, Andrea Massaccesi, and Riccardo Zich

Evolved design of microstrip patch antenna by genetic programming. International Conference on Electromagnetics in Advanced Applications (ICEAA), 2019. [Paper | Code]

WORK EXPERIENCE

VTI Corporation

Research Assistant April 2021 – Now

Advanced Intelligent System Laboratory

Shiga, Japan

- Developed a back-end API for data collection on cars
- · Analyzed the collected data and proposed a recommendation system based on driver's behavior

AI Algorithm Engineer

Laboratory Assistant

November 2019 – June 2020

Member of AI algorithms team, working on face recognition using deep learning

Communications Research and Development Laboratory

Oct. 2017 - Oct. 2019 Hanoi, Vietnam

Hanoi, Vietnam

· Led a group of undergrad. students for doing research on evolutionary algorithms on antenna design

EXTRACURRICULAR ACTIVITIES

October 2022 Volunteer International Conference on Intelligent Robots and Systems (IROS), Kyoto, Japan **Certificate of Participation** May 2019 The 36th student's research competition, Hanoi University of Science and Technology, Hanoi, Vietnam Volunteer July 2018 International Conference on Communications and Electronics (ICCE), Hue, Vietnam HONORS AND AWARDS March 2023 **Excellent Research Award** Recognition for top 10 students in academic achievement at Ritsumeikan University in 2022 Oct. 2022 - Sep. 2025 Japanese Government Scholarship (MEXT) Merit-based grant for students pursuing M.E. education in Japan Candidates list to be student representative at the degree awarding ceremony Spring 2022 Chosen based on overall academic and research performance during M.E. study Japanese Government Scholarship (MEXT) Oct. 2020 - Sep. 2022 Merit-based grant for students pursuing Ph.D. education in Japan Third Prize of Science Research Competition for Student May 2019 Prize for research results on evolutionary algorithm in the automation of antenna design

SKILLS

Languages: Strong reading, writing and speaking competencies for English and Vietnamese. **Programming**: Python (Pytorch, NumPy, SciPy, Matplotlib, Pandas), C/C++, MATLAB **Document Creation**: Microsoft Office Suite, LaTex, Markdown