BACH-THUAN BUI

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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

Bachelor of Engineering | *Telecommunications Engineering*   Sep. 2015 – Sep 2019
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

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   November 2019 – June 2020
VTI Corporation   Hanoi, Vietnam
- Member of AI algorithms team, working on face recognition using deep learning

Laboratory Assistant   Oct. 2017 – Oct. 2019
Communications Research and Development Laboratory   Hanoi, Vietnam
- Led a group of undergrad. students for doing research on evolutionary algorithms on antenna design

EXTRACURRICULAR ACTIVITIES

Volunteer October 2022
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

Young Author Award Jan 2024
SICE International Young Author Award, with prize money of JPY 100,000, SII2024

Excellent Research Award March 2023
Recognition for high-quality research results at Ritsumeikan University in 2022

Japanese Government Scholarship (MEXT) Oct. 2022 – Sep. 2025
Merit-based grant for students pursuing M.E. education in Japan

Candidates to be student representatives 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