



# BACH-THUAN BUI

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[Google Scholar](#)

## EDUCATION

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

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|--|---|
| <b>Research Assistant</b><br>Advanced Intelligent System Laboratory  | April 2021 – Now<br>Shiga, Japan            |
| <ul style="list-style-type: none"><li>• Developed a back-end API for data collection on cars</li><li>• Analyzed the collected data and proposed a recommendation system based on driver's behavior</li></ul> |   |
| <b>AI Algorithm Engineer</b><br>VTI Corporation  | November 2019 – June 2020<br>Hanoi, Vietnam |
| <ul style="list-style-type: none"><li>• Member of AI algorithms team, working on face recognition using deep learning</li></ul>  |   |
| <b>Laboratory Assistant</b><br>Communications Research and Development Laboratory  | Oct. 2017 – Oct. 2019<br>Hanoi, Vietnam     |
| <ul style="list-style-type: none"><li>• Led a group of undergrad. students for doing research on evolutionary algorithms on antenna design</li></ul>   |   |

## EXTRACURRICULAR ACTIVITIES

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| <b>Volunteer</b><br>International Conference on Intelligent Robots and Systems (IROS), Kyoto, Japan  | October 2022 |
| <b>Certificate of Participation</b><br>The 36th student's research competition, Hanoi University of Science and Technology, Hanoi, Vietnam | May 2019     |
| <b>Volunteer</b><br>International Conference on Communications and Electronics (ICCE), Hue, Vietnam  | July 2018    |

## HONORS AND AWARDS

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| <b>Excellent Research Award</b><br>Recognition for top 10 students in academic achievement at Ritsumeikan University in 2022                                       | March 2023            |
| <b>Japanese Government Scholarship (MEXT)</b><br>Merit-based grant for students pursuing M.S education in Japan  | Oct. 2022 – Sep. 2025 |
| <b>Candidates list to be student representative at the degree awarding ceremony</b><br>Chosen based on overall academic and research performance during M.S. study | Spring 2022           |
| <b>Japanese Government Scholarship (MEXT)</b><br>Merit-based grant for students pursuing Ph.D. education in Japan  | Oct. 2020 – Sep. 2022 |
| <b>Third Prize of Science Research Competition for Student</b><br>Prize for research results on evolutionary algorithm in the automation of antenna design         | May 2019              |

## SKILLS

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**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