

# Giang Nguyen

Computer Science ♦ Auburn University, AL, USA

email: nguyengiangbkhn@gmail.com ♦ website: <https://giangnguyen2412.github.io> ♦ cell: +1.334.524.2780

## EDUCATION

---

**Auburn University, AL**  
Ph.D. in Computer Science

Aug 2021 - present  
Advisors: [Anh Nguyen](#)

**KAIST - Korea Advanced Institute of Science and Technology, South Korea**  
M.Sc. in Computer Science  
Thesis: *Overcoming Catastrophic Forgetting by Deep Visualization*

2018 - 2020  
Advisor: [Daeyoung Kim](#)

**Hanoi University of Science and Technology, Vietnam**  
B.Eng. in Electronics and Telecommunications

2011 - 2016

## WORK EXPERIENCES

---

**Anh Nguyen Laboratory, Auburn University**  
*Research Assistant*

Aug 2021 - present  
*AL, USA*

- Doing research on both *Explainable AI & Computer Vision*, deeply interested in human-AI collaboration via machine explanations. One paper published at NeurIPS2022 and a poster at CVPRW2022.

**Data Engineering & Analytics Laboratory, KAIST**  
*Graduate AI Researcher*

Sept 2020 - Feb 2021  
*South Korea*

- Conducting research to evaluate the effectiveness of machine explanations on humans and showing the shortcoming of existing evaluation metrics. One paper published at NeurIPS2021.

**Data Engineering & Analytics Laboratory, KAIST**  
*Research Assistant*

Aug 2018 - Aug 2020  
*South Korea*

- One of 20 finalists at [Qualcomm-KAIST Innovation Awards 2019](#).
- Conducting computer vision research and publishing 3 papers at ICPR and ICONIP.

**G-Innovations**  
*Application Software Engineer*

Feb 2018 - Jul 2018  
*Hanoi*

- Optimizing minutiae detection algorithm running time by 80% and memory usage by 95% on AVR32.
- Building a commercial chatbot using AIML and Java to interact with customers for loan applications.

**DASAN Zhong Solutions Vietnam - DZS Vietnam**  
*Linux Embedded Software Engineer*

Jul 2016 - Jan 2018  
*Hanoi*

- One of 3 best interns (among 12) in Fall 2016 of DZS.
- Implementing network protocols on embedded network devices (e.g. switches, routers) by C/C++.

## PUBLICATIONS

[https://scholar.google.com/citations?user=l\\_kfXecAAAAJ](https://scholar.google.com/citations?user=l_kfXecAAAAJ)

---

### Peer-reviewed Papers and Preprints

- [\\*Nguyen, G., \\*Taesiri, M., Nguyen, A., 2022. Visual correspondence-based explanations improve AI robustness and human-AI team accuracy. \(CVPR2022-XAI4CV, NeurIPS2022\). \[poster\] \[pdf\]](#)  
\* denotes equal contributions.
- [Nguyen, G., Kim, D. and Nguyen, A., 2021. The effectiveness of feature attribution methods and its correlation with automatic evaluation scores. \(NeurIPS2021-WHMD, NeurIPS2021\). \[pdf\]](#)

- Nguyen G., Chen S., Jun T.J., Kim D. (2021) Explaining How Deep Neural Networks Forget by Deep Visualization. (ICPR2020-EDLAI). [[pdf](#)]
- Nguyen, G., Jun, T. J., Tran, T., Yalaw, T., & Kim, D. (2019). ContCap: A scalable framework for continual image captioning. arXiv preprint. [[pdf](#)]
- Tran, T.Q., Nguyen, G.V. and Kim, D., 2021, January. Simple Multi-Resolution Representation Learning for Human Pose Estimation. (ICPR2020). [[pdf](#)]
- Kim, H., Jun, T.J., Nguyen, G. and Kim, D., 2019, December. Bidirectional LSTM with MFCC Feature Extraction for Sleep Arousal Detection in Multi-channel Signal Data. (ICONIP2019). [[pdf](#)]
- Nguyen G (2020). Overcoming Catastrophic Forgetting by Deep Visualization. Master thesis at KAIST, South Korea. [[pdf](#)]

### Book translations

- 2020: Translation of *Interpretable Machine Learning: A Guide for Making Black Box Models Explainable* by Christoph Molnar to Vietnamese. Both pdf and tex version can be found [here](#).

## AWARDS AND ACTIVITIES

---

- 2014 & 2015: University scholarship for excellent students of HUST: \$200
- 2015: 1<sup>st</sup> Class award of Texas Instruments Innovation Challenge Vietnam – North Region: \$800
- 2016: DASAN Zhong Solutions scholarship for HUST excellent students: \$2500
- 2018: Korea Advanced Institute of Science and Technology (KAIST), MS scholarship: \$20.000/year
- 2021: Presidential Graduate Research Fellowship at Auburn University, US: \$30.000/year
- 2021: I serve as a PC (reviewer) at NeurIPS 2021 workshop.
- 2022: Registration award at CVPR 2022, New Orleans, LA, US: \$550.
- 2022: I serve as a PC (reviewer) at ICLR, AACL, and AISTATS 2023 main conference.