

Giang Nguyen

Computer Science ◊ Auburn University, AL, USA

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EDUCATION

Auburn University, AL

Ph.D. in Computer Science

Doing research on *Explainable AI & Computer Vision*

Aug 2021 - present

Advisors: [Anh Nguyen](#)

KAIST - Korea Advanced Institute of Science and Technology, South Korea

2018 - 2020

M.Sc. in Computer Science

Advisor: [Daeyoung Kim](#)

Thesis: *Overcoming Catastrophic Forgetting by Deep Visualization*

Hanoi University of Science and Technology, Vietnam

2011 - 2016

B.Eng. in Electronics and Telecommunications

WORK EXPERIENCES

Auburn University

Research Assistant

Aug 2021 - present

Auburn, AL

Data Engineering & Analytics Laboratory, KAIST

Graduate AI Researcher

Sept 2020 - Feb 2021

South Korea

- Conducting research to evaluate machine explanations on humans.

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 at top-1 AI conferences (e.g. NeurIPS2021).

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.

PUBLICATIONS

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 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: 1st 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 AAAI 2023 main conference.