Giang Nguyen

Computer Science ⋄ Auburn University, AL, USA

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EDUCATION

Auburn University, USA — 08/2021 → now
Ph.D. in Computer Science — Advisors: Anh Nguyen
I am conducting research on computer vision and human-AI collaboration via machine explanations.

Korea Advanced Institute of Science and Technology, South Korea — 08/2018 → 08/2020
M.Sc. in Computer Science — Advisor: Daeyoung Kim
Thesis: *Overcoming Catastrophic Forgetting by Deep Visualization*

Hanoi University of Science and Technology, Vietnam — 09/2011 → 06/2016
B.Eng. in Electronics and Telecommunications — Advisor: Minh Nguyen

WORK EXPERIENCES

Anh Nguyen Laboratory, Auburn University, USA — 08/2021 → now
Research Assistant

JPMorgan Chase – AI Research, NYC, NY — 06/03/2024 → 08/17/2024
AI Research Intern

Data Engineering & Analytics Laboratory, KAIST, South Korea — 09/2020 → 02/2021
Graduate AI Researcher

Data Engineering & Analytics Laboratory, KAIST, South Korea — 08/2018 → 08/2020
Research Assistant

G-Innovations, Hanoi — 02/2018 → 07/2018
Application Software Engineer

DASAN Zhone Solutions Vietnam, Hanoi — 07/2016 → 01/2018
Linux Embedded Software Engineer

AWARDS AND ACTIVITIES

Awards

· 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 Zhone Solutions scholarship for HUST excellent students: $2.500
· 2018: Korea Advanced Institute of Science and Technology (KAIST), MS scholarship: $20.000/year
· 2021: Presidential Graduate Research Fellowship at Auburn University, USA: $32.000/year
· 2022: Registration award at CVPR 2022, New Orleans, LA, USA. cert
· 2023: I got the Diversity Graduate Student Support Award at Auburn University: $1000. cert
· 2023: Best Performing Team and the creator of the Most Innovative Solution at ACM MMSports 2023 DeepSportradar Challenge: Player Instance Segmentation: $1000. cert
· 2024: Outstanding Doctoral Student Nomination Award, Auburn University (2/240 of Computer Science graduate students).
· I has been serving as a reviewer at NeurIPS, ICLR, ICML, CVPR, ICCV, and AAAI.

Mentoring

· Viet Pham (HCMUS, Vietnam) - 11/2020 → 04/2021: Semi-supervised Neural Machine Translation with Consistency Regularization for Low-Resource Languages. arXiv preprint. [pdf]
· Son Nguyen (KAIST, South Korea) - 2023: Ranked 1st at ACM MMSports 2023 Instance Segmentation Challenge. Ranked **7/46** in ICCV 2023 VIPriors Instance Segmentation Challenge.

PUBLICATIONS   https://scholar.google.com/citations?user=l_kfXecAAAAJ

Peer-reviewed Papers and Preprints

· CVPRW2024 Giang Nguyen, Mohammad Reza Taesiri, Sunnie S. Y. Kim, Anh Nguyen, 2024. **Allowing humans to interactively guide machines where to look does not always improve human-AI team's classification accuracy**. [pdf]
· Under review Giang Nguyen, Valerie Chen, Anh Nguyen, 2023. **Learning to Distinguish Correct and Wrong Classifications via Nearest-Neighbor Explanations**. [pdf]
· NeurIPS2023 Taesiri, M., Nguyen, G., Habchi, S., Bezemer CP., Nguyen, A., 2023. **ImageNet-Hard: The Hardest Images Remaining from a Study of the Power of Zoom and Spatial Biases in Image Classification**. [pdf]
· NeurIPS2022 *Nguyen, G., *Taesiri, M., Nguyen, A., 2022. **Visual correspondence based explanations improve AI robustness and human-AI team accuracy**. [poster] [pdf]
  * denotes equal contributions.
· NeurIPS2021 Nguyen, G., Kim, D. and Nguyen, A., 2021. **The effectiveness of feature attribution methods and its correlation with automatic evaluation scores**. [pdf]
· ICPR2020 Nguyen G., Chen S., Jun T.J., Kim D., 2021. **Explaining How Deep Neural Networks Forget by Deep Visualization**. [pdf]
· ICPR2020 Tran, T.Q., Nguyen, G.V. and Kim, D., 2021. **Simple Multi-Resolution Representation Learning for Human Pose Estimation**. [pdf]
· ICONIP2019 Kim, H., Jun, T.J., Nguyen, G. and Kim, D., 2019. **Bidirectional LSTM with MFCC Feature Extraction for Sleep Arousal Detection in Multi-channel Signal Data** . [pdf]
· arXiv Nguyen, G., Jun, T. J., Tran, T., Yalew, T., & Kim, D., 2019. **ContCap: A scalable framework for continual image captioning**. [pdf]
· arXiv Pham, V. H., *Pham, T. M., *Nguyen, G., Nguyen, L., & Dinh, D., 2023. **Semi-supervised Neural Machine Translation with Consistency Regularization for Low-Resource Languages**. [pdf]
· arXiv Son Nguyen, Mikel Lainsa, Hung Dao, Daeyoung Kim, Giang Nguyen, 2023. **Instance Segmentation under Occlusions via Location-aware Copy-Paste Data Augmentation**.[pdf]

INVITED TALKS

· 04/2023: *Towards Useful Visual XAI Methods for Human-AI Collaboration*, L3S Research Center, Delft University of Technology (TU Delft), Netherlands. slide.
· 03/2022: *Evaluating Interpretability in Vision*, Explainable AI group.
· 06/2020: *Explaining How Deep Neural Networks Forget by Deep Visualization*, ContinualAI. video.