DUONG H. LE

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EDUCATION

Ho Chi Minh City University of Technology *August 2016 - November 2020*
Department of Computer Science and Engineering
Bachelor of Science (Honors Program)

- Cumulative GPA: 8.49/10
- Thesis topics: Toward real-world High-Performance Computing Cluster Job Scheduling with Reinforcement Learning

RESEARCH INTERESTS

3D Scene Understanding, Efficient Deep Learning, Neuro-Symbolic Visual Reasoning

RESEARCH EXPERIENCE

AI Resident *July 2020 - Present*
VinAI Research
Mentor: Dr. Binh-Son Hua

- *Network Pruning that Matters*: propose, conduct experiments to demonstrate a counter-intuitive phenomenon in network pruning. The work is later published at ICLR 2021.

Research Assistant *February 2018 - July 2020*
High-Performance Computing Lab, Ho Chi Minh City University of Technology
Supervisor: Prof. Thoai Nam

- *Optimizing color-based cooperative caching algorithm for Telco-CDNs*: discuss, clarify the idea of using the Transformer to combine the self-attention and dual-attention model to predict popularity of online contents for caching and write article.
- *Job Scheduling with Reinforcement Learning for High-Performance Computing Cluster*: Propose, implement the hindsight credit assignment methods for input-driven MDP deal with exogenous input processes of jobs arrival.

Research Intern *June 2019 - September 2019*
Adaptive Computing Lab, School of Computing, National University of Singapore
Supervisor: Prof. David Hsu

- *GoAnywhere@NUS*: Learn about Imitation Learning, Path Planning and Robotic Operation System (ROS). Configuring the robot, trying different models that leverage the new sensors for car controller, collecting data.

Research Intern *June 2018 - August 2018*
Nakagawa Lab, Tokyo University of Agriculture and Technology
Supervisor: Prof. Masaki Nakagawa

- *Apply GAN to improve old Japanese characters recognition*: Implement the GAN network for augment the dataset of old Japanese characters images and conduct experiements.

PUBLICATION

- **Duong H. Le**, Binh-Son Hua. "Network Pruning that Matters: A Case Study with Retraining Variants". The 9th International Conference on Learning Representations (ICLR) 2021.
- **Duong H. Le**, Nhan Vo Trung, Nam Thoai. "Paying more Attention to Snapshots of Iterative Pruning: Improving Model Compression via Ensemble Distillation". The 31st British Machine Vision Conference (BMVC) 2020.
- Nguyen, Minh-Tri, **Duong H. Le**, M. Yoshimi T. Nakajima, Masato Yoshimi, and Nam Thoai. "Attention-based Neural Network: A Novel Approach for Predicting the Popularity of Online Content." In The IEEE 21th International Conferences on High Performance Computing and Communications. IEEE. 2019. Zhangjiajie, China, 2019 pp. 329-336.

REFERENCE

Nam Thoai, Faculty of Computer Science and Engineering, Ho Chi Minh City University of Technology (HCMUT), Vietnam National University - Ho Chi Minh City (VNUHCM), namthoai@hcmut.edu.vn