Thanh Tang NGUYEN

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Deakin University
Applied Artificial Intelligence Institute (A^2I^2)
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Education

- **Deakin University**, Geelong, Australia (Expected) 2021
  PhD candidate in Machine Learning and Statistics
  Advisor: Sunil Gupta & Svetha Venkatesh
- **Ulsan National Institute of Science and Technology (UNIST)**, South Korea 2018
  M.S. in Computer Science & Engineering (GPA: 4.3/4.0, Top graduate)
  Thesis: Parametric information bottleneck to optimize stochastic neural networks
  Advisor: Jaesik Choi
- **Da Nang University of Science and Technology**, Vietnam 2015
  B.Eng. in Electronic and Communication Engineering (Advanced Program, valedictorian)
- **Da Nang Le Quy Don high school for gifted students**, Vietnam 2010
  High School Diploma in Mathematics.

Research Interests

Machine Learning, Reinforcement Learning, Statistics, Information Bottleneck, Learning Theory, Optimization.

Experience

- **Researcher** Mar. 2018 - Dec. 2018
  Ulsan National Institute of Science and Technology (South Korea), School of Computer Science & Engineering, Statistical Artificial Intelligent Lab (SAIL).
- **Research & Teaching Assistant** Mar. 2016 - Mar. 2018
  Ulsan National Institute of Science and Technology (South Korea), School of Computer Science & Engineering, Statistical Artificial Intelligent Lab (SAIL).
- **Mobile Network Intern & Engineer** Jan. 2015 - Aug. 2015
  Viettel Network Corporation (Vietnam).
- **Teaching Assistant & Research Assistant** 2011 - Jan. 2015 & Aug. 2015 - Mar. 2016
  Da Nang University of Science and Technology (Vietnam), Center of Excellence, Electronic and Communication Engineering.

Publications

- TT Nguyen, S. Gupta, and S. Venkatesh.
  Distributional Reinforcement Learning via Moment Matching.
  Proceedings of the 35th AAAI Conference on Artificial Intelligence (**AAAI**), Vancouver, Canada, Feb. 2-9, 2021.
- TT Nguyen, S. Gupta, H. Ha, S. Rana, and S. Venkatesh.
  Distributionally Robust Bayesian Quadrature Optimization.
  Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics (**AISTATS**), Palermo, Italy, 2020.
- TT Nguyen, and J. Choi.
  Markov Information Bottleneck to Improve Information Flow in Stochastic Neural Networks.
  Entropy, 21(10), 976, 2019.

- H. Ha, S. Rana, S. Gupta, TT Nguyen, H. Tran-The, and S. Venkatesh.
  Bayesian Optimization with Unknown Search Space.
  Proceedings of the Advances in Neural Information Processing Systems (**NeurIPS**) 32, Vancouver, BC, Canada, 8–14 December, 2019.

- TT Nguyen, and J. Choi.
  Parametric Information Bottleneck to Optimize Stochastic Neural Networks.
  Proceedings of the International Symposium on Perception, Action and Cognitive Systems (**PACS**), p. 23-30, Seoul, Korea, 2017. (Best Poster Award)

Preprints

- TT Nguyen, S. Gupta, H. Tran-The, and S. Venkatesh.
  On Non-Asymptotic Bounds for Off-Policy Evaluation with Deep ReLU Networks.
  Under review. 2020.

Professional/Community Serving

- Invited reviewer/PC member: ICML (2021), AISTATS (2021), AAAI (2021), ICLR (2021), NeurIPS (2020), IJCNN (2020).
- Mentoring: Machine Learning mentor program (with 2 mentees so far)

Selected Awards

- Machine Learning Summer School (MLSS) 2020 at the Max Planck Institute for Intelligent Systems, Tübingen, Germany (acceptance rate: 13.84%).
- Australian Research Council (ARC) and PRaDA Postgraduate Research Scholarship 2019-2023;
- Best Poster Award, the International Symposium on Perception, Action and Cognitive Systems, 2017;
- Ulsan National Institute of Science and Technology Postgraduate Scholarship, 2016-2018;
- Valedictorian and the sole First-Class Graduate in the Electronic and Communication Engineering Program at the Center of Excellence (an advanced engineering program), Da Nang University of Science and Technology, 2015;
- Scholarships for Outstanding Academic Excellence from Da Nang University of Science and Technology in 2010 - 2015;
- JENESYS 2.0 Exchange student by Japan International Cooperation Center 2015;
- Sunflower Mission Engineering & Technology Scholarship by eSilicon and Texas Instrument, 2014;
- Third and Second Prize in Mathematics Competition of Da Nang University in 2012 and 2013 resp.;
- Takemoto Denki scholarship in 2012; Lawrence S.Ting scholarship per academic year from 2013 to 2015; Nguyen Thai-Binh Scholarship in 2013; Thanh-Nhan Scholarship in 2013;
- First Prize in the National Competition of Solving Mathematical Problems by the Journal of Mathematics and Youth, 2010;
- Silver Medal in Southern Vietnam Mathematics Olympiad, 2008;
- First Prizes in Da Nang Mathematics Competition for high school students in 2008, 2009, and 2010.

Skills

Programming: python, MATLAB, C++; **Deep learning framework**: Tensorflow, Pytorch; **Parallel computing**: OpenMP, MPI, CUDA, pthreads.

Languages

Vietnamese : Native
English : Proficient (TOEFL iBT score of 96)

References

- Alfred Deakin Prof. Svetha Venkatesh
  Deakin University
  Applied Artificial Intelligence Institute
  svetha.venkatesh@deakin.edu.au
- Assoc. Prof. Sunil Gupta
  Deakin University
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  sunil.gupta@deakin.edu.au
- Assoc. Prof. Jaesik Choi
  Korea Advanced Institute of Science and Technology (KAIST)
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  Statistical Artificial Intelligent Lab (SAIL)
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(Updated: December 9, 2020)

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- Dr. Thai-Son Nguyen-Duy
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  Da Nang University of Education
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