

Wenling Shang

w.shang@uva.nl

Education

University of Amsterdam, Amsterdam, Netherlands, Sept. 2017- Present
Ph.D in Machine Learning, supervised by Max Welling

University of Michigan, Ann Arbor, MI, Sept. 2011- Dec. 2015
Masters in Applied and Interdisciplinary Mathematics

Washington and Lee University, Lexington, VA, Sept. 2007-May 2011
B.S. in Mathematics and Physics Engineering, Minor in Computer Science

Budapest Semesters in Mathematics, Budapest, Hungary, Aug.-Dec. 2009
Visiting Student in Mathematics and Computer Science

Oxford University, Oxford, U.K., Jan.-June 2010
Visiting Student in Mathematics and Engineering

Professional Experiences

Research Intern, NVIDIA, Santa Clara, CA, July 2019-Now.
• Generative modeling of videos.

Research Intern, Salesforce AI, Palo Alto, CA, March 2019-June 2019.
• Construct graph representation of the environment for learning RL tasks.

Research Engineer Intern, Nines, Palo Alto, CA, June 2018-August 2018.
• Built medical imaging machine learning pipeline for a stealthmode startup.

Teaching Assistance, University of Amsterdam, Netherlands, Sept. 2017-Now.
• Behavior-Based Robotics, Probability Theory, Introduction to Python.

Vision Software Engineer, Facebook Inc., Menlo Park, CA, March 2016-Sept 2017.
• Hand tracking for Oculus VR.

Research Intern, Technicolor Research, Los Altos, CA, June-Aug 2015.
• Researched a scene understanding project using energy models.

Data Software Engineer Intern, Chartboost, San Francisco, CA June-Aug 2014.
• Improved Analytic API and constructed an install-fraud detection system.

Graduate Student Instructor, University of Michigan, Ann Arbor, MI 2011-2015.
• TA for Stochastic Processes (Graduate-Level), Differential Equations.
• Primary Instructor for Pre-Calculus, Calculus I, and Calculus II.

Publications

Learning World Graphs to Accelerate Hierarchical Reinforcement Learning, **W. Shang**, A. Trott*, S. Zheng*, C. Xiong, R. Socher. submitted to NeurIPS (2019).

Stochastic Activation Action-Critic Methods, **W. Shang**, H. Hoof, and M. Welling. ECML (2019).

Unsupervised Domain Adaptation for Distance Metric Learning, K. Sohn, **W. Shang**, X. Yu, M. Chandraker. ICLR (2019).

Attentive Conditional Channel-Recurrent Autoencoding for Attribute-Conditioned Image Synthesis, **W. Shang**, K. Sohn. WACV (2019).

Channel-Recurrent Autoencoding for Image Modeling, **W. Shang**, K. Sohn, and Y. Tian. WACV (2018).

ELF: An Extensive, Lightweight and Flexible Research Platform for Real-time Strategy Games, Y. Tian, Q. Gong, **W. Shang**, Y. Wu and L. Zitnick. NIPS, oral (2017).

Exploring Normalization in Deep Residual Networks with Concatenated Rectified Linear Units, **W. Shang**, J. Chiu, and K. Sohn. AAAI (2017).

Understanding and Improving Convolutional Neural Networks via Concatenated Rectified Linear Unit, **W. Shang**, K. Sohn, D. Almeida and H. Lee. ICML (2016).

Discriminative Training of Structured Dictionaries via Block Orthogonal Matching Pursuit, **W. Shang**, K. Sohn, H. Lee and A. Gilbert. SIAM SDM (2016).

Improved Multimodal Deep Learning with Variation of Information, K. Sohn, **W. Shang** and H. Lee. NIPS (2014).

Normal Weighted Composition Operators on Weighted Dirichlet Spaces, L. Lu, Y. Nakada, D. Nestor, **W. Shang** and R. Weir. JMAA (2014).

A Moment-based Approach for DVH-guided Radiotherapy Treatment Plan, M. Zarepisheh, M. Shakourifar, G. Trigila, P. Ghomi, S. Couzens, A. Abebe, L. Norena, **W. Shang**, S. Jiang and Y. Zinchenko. Physics in Medicine and Biology (2013).

Reproducing Kernel Hilbert Spaces Supporting Nontrivial Hermitian Weighted Composition Operators, P. Bourdon, **W. Shang**. Complex Analysis and Operator Theory (2011).

The Weighted Composition Operators in Hilbert Spaces, P. Bourdon, **W. Shang**. Joint Math Meetings (2011). Poster Award.

Conference and Journal Review

NeurIPS, ICML, UAI, AISTATS, CVPR, ICCV, AAAI, Neural Computation, Transactions on Computational Intelligence and AI in Games
Transactions on Neural Networks and Learning Systems

Languages

Python (PyTorch), Lua (Torch), Matlab, C++ (openCV)

Honors Awards

Graduate Student Fellowship, Mathematics Department, University of Michigan
Conference Travel Grant, University of Michigan
One Term Dissertation Fellowship, University of Michigan
International Student Grant (covering college tuition), Washington and Lee University
R.E. Lee Scholarship, Washington and Lee University
Phi Beta Kappa, National Honor Society
Williams Prize, Mathematics Department, Washington and Lee University
Frank Young Scholarship, Geology Department, Washington and Lee University
Pi Mu Epsilon, Mathematics Honor Society
Beijing High School Science and Technology Competition, Second Prize, 2006
Beijing High School Mathematics Competition, Third Prize, 2006
Beijing High School Chemistry Competition, Third Prize, 2006
Beijing Middle School Mathematics Competition, Third Prize, 2003