

TINGWU WANG

Research Scientist at Nvidia Animation

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EDUCATION



University of Toronto, Ontario, Canada

PhD in Computer Science

Jan. 2018 - June 2022

Advisor: Prof. Sanja Fidler and Prof. Jimmy Ba

Master of Computer Science

Jul. 2016 - Jan. 2018

Advisor: Prof. Sanja Fidler

GPA: 4.00/4.00



Tsinghua University, Beijing, China

Aug. 2012 - Jul. 2016

Bachelor of Electronic Engineering

GPA: 91.1/100



Technische Universität München, Bavaria, Germany

Aug. 2014 - Feb. 2015

Exchange student in Department of Informatics

PUBLICATIONS, PREPRINTS AND PATENTS

Tingwu Wang, Yunrong Guo, Kevin Xie, Xue Bin Peng, Sanja Fidler, *GraphCon: Physics-based Animation with Varying Skeleton Graphs*, Arxiv, 2022.

Kevin Xie, **Tingwu Wang**, Umar Iqbal, Yunrong Guo, Sanja Fidler, Florian Shkurti, *Physics-based Human Motion Estimation and Synthesis from Videos*, International Conference on Computer Vision, ICCV, 2021.

Tingwu Wang, Yunrong Guo, Maria Shugrina, Sanja Fidler, *UniCon: Universal Neural Controller For Physics-based Character Motion*, Arxiv 2020.

Tingwu Wang, Jimmy Ba, *Exploring Model-based Planning with Policy Networks*, International Conference on Learning Representations (ICLR'20).

Jiaman Li, Yihang Yin, Hang Chu, Yi Zhou, **Tingwu Wang**, Sanja Fidler, Hao Li, *Learning to Generate Diverse Dance Motions with Transformer*, Arxiv 2020.

Tingwu Wang, Xuchan Bao, Ignasi Clavera, Jerrick Hoang, Yeming Wen, Eric Langlois, Shunshi Zhang, Guodong Zhang, Pieter Abbeel, Jimmy Ba, *Benchmarking Model-Based Reinforcement Learning*, Arxiv 2019.

Tingwu Wang*, Henry Zhou*, Sanja Fidler, Jimmy Ba, *Neural Graph Evolution: Towards Efficient Automatic Robot Design*, International Conference on Learning Representations (ICLR'19).

Tingwu Wang*, Renjie Liao*, Jimmy Ba, Sanja Fidler, *NerveNet: Learning Structured Policy with Graph Neural Networks*, International Conference on Learning Representations (ICLR'18).

Xavier Puig, Kevin Ra, Marko Boben, Jiaman Li, **Tingwu Wang**, Sanja Fidler, Antonio Torralba, *VirtualHome: Simulating Household Activities via Programs*, Conference on Computer Vision and Pattern Recognition (CVPR'18) (Oral).

Tingwu Wang, Chunxiao Jiang and Yong Ren, *Access Points Selection in Super WiFi Network Powered by Solar Energy Harvesting*, IEEE Wireless Communications and Networking Conference (WCNC'16).

Tingwu Wang, Jinjin Wang, Chunxiao Jiang, Jian Wang and Yong Ren, *Access Strategy in Energy Harvesting Super WiFi Network: A POMDP Method*, IEEE 83rd Vehicular Technology Conference, 2016 (VTC'16).

Qiu Shi, Po Man Cheng, **Tingwu Wang**, Yan Xia and Wei Zhang, *Costume Detection and Attribute Value Identification Method and System*, Patent: CN105447529 A, 2016.

RESEARCH AND WORK EXPERIENCE

NVIDIA

Research Scientist

Mar. 2022 -

Nvidia Animation Team

NVIDIA

Research Scientist at Toronto AI Lab

Oct. 2020 - Mar. 2022

Mentor: Prof. Sanja Fidler

NVIDIA

Student Research Intern at Toronto AI Lab

May 2019 - Oct. 2020

Mentor: Prof. Sanja Fidler

MMLAB

Visiting Research Assistant

Jul. 2015 - Sep. 2015

Mentor: Prof. Xiaoou Tang, Prof. Chen Change Loy

SenseTime Limited

Research Engineer

May. 2015 - Mar. 2016

Mentor: Dr. Yan Xia

NGN Lab

Research Assistant

Dec. 2015 - Aug. 2016

Advisor: Prof. Xing Li

Complex Systems Lab

Research Assistant

May. 2014 - Aug. 2015

Advisor: Prof. Yong Ren, Prof. Chunxiao Jiang

Institute of Circuits and Systems & Intel

Research Assistant

Sep. 2013 - Feb. 2014

Advisor: Prof. Fei Qiao

SKILLS

Programming Languages:

C++, Matlab, Python, Verilog, Java, Bash, Cython, Javascript

Project Experiences:

Ubuntu, Raspbian, OpenWrt, Tensorflow, PyTorch, Caffe, CUDA, Django.

SERVICES

Reviewer for ICLR, ICML, NeurIPS, SIGGRAPH, AAAI, UAI, ICCV, ECCV

2016 - Now

TEACHING

Department of Computer Science, University of Toronto:

Teaching Assistant for CSC 420, Image Understanding

Fall Semester, 2016

Teaching Assistant for CSC 320, Introduction to Visual Computing

Winter Semester, 2017

Teaching Assistant for CSC 411, Introduction to Machine Learning

Fall Semester, 2017

Teaching Assistant for CSC 411, Machine Learning and Data Mining

Winter Semester, 2018

Teaching Assistant for CSC 2541, Deep Reinforcement Learning

Fall Semester, 2018

Teaching Assistant for CSC 2621, Reinforcement Learning in Robotics

Winter Semester, 2020