Yue Meng

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EDUCATION

M.S. in Electrical and Computer Engineering Sep. 2017 - Mar. 2019
University of California San Diego, CA, USA **GPA: 3.97/4.00**

B.E. in Department of Automation Aug. 2013 - Jul. 2017
Tsinghua University, Beijing, China **GPA: 87/100, rank: top 30%**

FIELD OF INTERESTS

Semantic & geometry perception; 3D reconstruction; autonomous navigation;

RESEARCH EXPERIENCE

Research Intern, Honda Research Institute, San Jose, CA, USA Mar. 2019 - Jun. 2019
Advisor: Yi-Ting Chen, Research Scientist
- Learn semantic 3D representation from videos and multi-modal sensors

Research Assistant, University of California San Diego, CA, USA Jan. 2018 - Mar. 2019
Advisor: Nikolay A. Atanasov, Electrical and Computer Engineering
- Developed semantic perception and tracking pipeline for 3D reconstruction
- Conducted research in object level 3D compression for mapping
- Presented on **RSS 2018** workshop and submitted works to **IROS 2019**

Research Assistant, University of California San Diego, CA, USA Sep. 2018 - Dec. 2018
Advisor: Dinesh Bharadia, Tara Javidi, Electrical and Computer Engineering
- Proposed semantic unsupervised learning framework for scene geometry perception
- Improved depth prediction by 30% over state-of-art unsupervised algorithms
- Published the paper as first author in **CVPR 2019**

Research Assistant, Tsinghua University, Beijing, China Sep. 2015 - Jun. 2017
Advisor: Li Li, Department of Automation
- Designed a simulation platform for micro-scope transportation at non-signal intersections
- Analyzed different cooperative driving strategies in traffic flow simulations
- Published the paper as first author in **IEEE TVT 2018**

PUBLICATIONS

Y. Meng, Y. Lu, A. Raj, S. Sunarjo, G. Bansal, R. Guo, T.Javidi, and D. Bharadia, "SIGNet: Semantic Instance Aided Unsupervised 3D Geometry Perception," in *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition*(**CVPR**), CA, Jun. 2019 (acceptance rate 25.2%)

Q. Feng, **Y. Meng**, M. Shan, and N. Atanasov, "Localization and Mapping using Instance-specific Mesh Models," submitted to 2019 *IEEE International Conference on Intelligent Robots and Systems*(**IROS**)

Y. Meng, L. Li, F. Wang, K. Li, and Z. Li, "Analysis of Cooperative Driving Strategies for Nonsignalized Intersections," *IEEE Transactions on Vehicular Technology, 67 (4)*, 2900-2911

TEACHING EXPERIENCE

Teaching Assistant, University of California, San Diego, CA, USA Jan. 2019 - Mar. 2019
Instructor: Behrouz Touri, Electrical and Computer Engineering
Course: Stochastic Processes in Dynamic Systems I

PROFESSIONAL EXPERIENCE

Software Engineering Intern, Google Inc, New York, NY, USA Jun. 2018 - Sep. 2018
- Migrated Ads prediction models from Sibyl to Tensorflow platform
- Created MapReduce jobs for analysis on production data

System Development Intern, TuSimple Inc, Beijing, China Jul. 2017 - Sep. 2017
- Implemented real-time perception algorithm for cameras on bus using Faster-RCNN
- Optimized the image processing procedures and increased the pipeline efficiency by 40%

TECHNICAL SKILLS

Programming: Python, C++, Matlab, C#

Tools: Tensorflow, Pytorch, ROS, Git, Linux, Docker, Kubernetes, LaTeX

Languages: Proficient in English and Chinese

GRADUATE COURSES (ALL)

ECE272A	Stochastic Processes in Dynamic Systems I	**A+, 1/78**
ECE269	Linear Algebra and Applications	**A+, 1/191**
ECE276A	Sensing and Estimation in Robotics	**A, 3/113**
ECE273	Convex Optimization and Applications	**A, 4/107**
ECE271A	Statistical Learning I	**A+, 5/202**
CSE252A	Computer Vision I	**A+, 5/165**
CSE253	Neural Networks for Pattern Recognition	**A+, 6/212**
CSE254	Intrinsic dimension and Dimension reduction	**A, */18**
MATH245B	Convex Analysis and Optimization II	**A, */25**
ECE271C	Deep Learning and Applications	**A, 13/33**
MAE281A	Nonlinear Systems	**A-, 15/39**

AWARDS AND HONORS

Study Scholarship of Tsinghua University, 2014, 2015

Sports Scholarship of Tsinghua University, 2014, 2015

8^{th} Award in RoboCup@Home Competition, 2015

First Award in first Tsinghua Undergraduate Class Futsal Match, 2014

First Awards in male 1500m, 4×800m, 4×400m races in Tsinghua Athletic Meeting

Tsinghua high school male 3000m race **record holder (2012-Present)**