Xueyan Zou

CONTACT Email: xueyanzoucs@gmail.com Github: https://github.com/MaureenZOU RESEARCH Network Robustness, Video Analysis, Instance Segmentation INTERESTS Python, Cuda, C, PyTorch, MxNet, Caffe, Tensorflow **PROGRAMMING** SKILLS **EDUCATION** University of California, Davis Davis, USA PhD Student 2018 Fall - Present **Hong Kong Baptist University (HKBU)** Hong Kong B.Sc. School of Computer Science. (First Class Honour) 2015 Fall - 2018 Winter Carnegie Mellon University (CMU) Pittsburgh, USA Exchange Student, Electrical & Computer Eng. 2017 Summer McGill University (McGill) Montreal, CA Exchange Student, School of Computer Science. 2016 Fall Hong Kong Baptist University (HKBU) Hong Kong B.Bus. School of Business. 2013 Fall - 2015 Fall Xueyan Zou, Fanyi Xiao, Zhiding Yu, Yong Jae Lee, "Delving deeper into network anti-aliasing in ConvNets" **PUBLICATIONS** (ICML 2020, submitted), 2020. 2017 Honors & • First Class Prize, ASC17 (Ranked 4/230 teams on Traffic Prediction globally) Asia Supercomputer Community Student Supercomputer Challenge **AWARDS** • HKBU Overseas Research Scholarship for CMU (1/109) 2017 Summer • Liu Hao Tsing Scholarship Fund (1/1700) 2016 • McGill University Student Exchange Scholarship (2/109) 2016 Fall • HKBU Computer Science Outstanding Student Scholarship (5%) 2015 Spring • HKBU Computer Science Outstanding Student Scholarship (5%) 2015 Fall University of California, Davis RESEARCH Davis, USA EXPERIENCE Research Assistant (Supervisor: Prof. Yong Jae Lee. Mentor: Fanyi Xiao) Sept 2018 - Now. • Research Project: Delving deeper into network anti-aliasing in ConvNets

- Introduce a pixel-channel adaptive anti-aliasing module for convolutional neural network which benefits especially for pixel classification tasks.
- Introduce an evaluation metric for shift-invariance (consistency) on instance segmentation.
- Surpass strong baselines on various tasks: Deeplab v3+, resnet101, PASCAL VOC (+1.8), Mask R-CNN, resnet101, COCO (+1.1/1.3 mask/box), ResNet-101, imagenet (+0.54)

TuSimple, Inc Beijing, China

Research Intern (Supervisor: Naiyan Wnag, Yuanqin Lu)

Mar 2018 - June 2018.

- Research Project: Depth Completion
- Wrote a cuda layer for Spatial Propagation Network in MxNet
- Extend Spatial Propagation Network to depth completion with mean rmse 1.253 on KITTI depth completion benchmark.

Carnegie Mellon University

Pittsburgh, USA

- Summer Intern (Supervisor: Prof. Vijayakumar Bhagavatula. Mentor: Zhiding Yu) June 2017 Sept 2017
- Research Project: A Single Network Towards Both Unsupervised Style Transfer and Object Transfiguration
- Introduce a multi-objective architecture that enables various types of translations without hand-tuning of network architectures, loss types, and loss weights.
- Introduce a learning phase called "identity pre-train", which helps to stabilize training on difficult object transfiguration tasks, while shows nice properties in various tasks.

INTERESTS

Novel Writing (700,000 clicking rate on Baidu Community), water color painting and piano, (one more for cooking delicious traditional Chinese Food:)