

Mengqing Jiang

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EDUCATION

Carnegie Mellon University , School of Computer Science	Pittsburgh, PA
<i>Master of Science in Computer Vision (MSCV) QPA: 4.22/4.33</i>	2018 - Dec 2019
<ul style="list-style-type: none">• Courses: Introduction to Machine Learning; Computer Vision; Math Fundamentals for Robotics	
Tsinghua University	Beijing, China
<i>Bachelor of Engineering in Software Engineering GPA: 90/100 top 10%</i>	2014 - 2018

PROFESSIONAL EXPERIENCE

Momenta, R&D Dept.	Beijing, China
<i>Software Engineer Intern</i>	Mar 2018 - July 2018
<ul style="list-style-type: none">• Developed a pipeline for Lincoln MKZ dynamics simulation on Unreal Engine 4 with CarSim plugins• Conducted large-scale automated safety tests for the auto pilot algorithms on Unreal Engine 4• Investigated active sub-lane changing algorithms for autonomous car in the case of traffic congestion	
SenseTime Inc., R&D Dept.	Beijing, China
<i>Computer Vision Engineer Intern</i>	Jun 2016 - Dec 2016
<ul style="list-style-type: none">• Co-designed and developed a novel CNN model for image classification with attention mechanism, achieving 19.5% top-1 single crop validation error on ImageNet, and published a paper• Reproduced computer vision baseline deep models, e.g. Faster R-CNN, R-FCN (for object detection); ResNet (for image classification); FCN, DeconvNet, DeepLab (for image semantic segmentation) on Caffe	

RESEARCH EXPERIENCE

Berkeley AI Research, Berkeley DeepDrive	Berkeley, CA
<i>Undergraduate Research Assistant</i> under Professor Trevor Darrell	Jun 2017 - Dec 2017
<ul style="list-style-type: none">• Detected pedestrians using LiDAR point cloud and investigated Imitated Control for Vehicle Pedestrian Interaction• Construct experimental system and infrastructure based on ROS for self-driving car, including data visualization dashboard, camera & LiDAR calibration tools for sensor fusion, motion2control APIs, etc.	
Deep Coding Group, HKUST	Hong Kong
<i>Undergraduate Research Assistant</i> under Professor Sung Kim (remotely)	Dec 2016 - May 2017
<ul style="list-style-type: none">• Researched on Doodle2Code—CNN+LSTM based HTML Code Generation Given Hand-written Webpage Doodles• Built a large-scale web screenshot dataset and collected hand-written webpage doodles; then conducted experiments on both datasets and achieved 49.21 BLEU score with no grammar error on the doodle dataset using transfer learning	

PUBLICATIONS

1. Fei Wang, **Mengqing Jiang**, Chen Qian, Shuo Yang, Cheng Li, Honggang Zhang, Xiaogang Wang, Xiaoou Tang, "Residual Attention Network for Image Classification", CVPR 2017 (*spotlight*)
2. Shifeng Zhang, Jianmin Li, **Mengqing Jiang**, Bo Zhang, "Scalable Discrete Supervised Multimedia Hash Learning with Clustering", IEEE TCSVT 2017

SELECTED COURSE PROJECTS

Face Retrieval System Using Residual Attention Network	Fall 2017
<ul style="list-style-type: none">• Built a face verification and retrieval system on Caffe. Trained the Attention-56 model on MS-Celeb-1M dataset, tested on LFW, and achieved 99.61% verification accuracy	
SNP Set Analysis for Detecting Disease Association Using Ant Colony Algorithm	Fall 2017
<ul style="list-style-type: none">• Implemented AntEpiSeeker Algorithm and chi-square independence test in Python to heuristically and efficiently find out the salient SNP positions that have epistatic interactions to the disease among a large-scale dataset	
WeLearn (a WeChat web application)	Fall 2016
<ul style="list-style-type: none">• Designed and developed a user-friendly mobile webapp based on WeChat for students of Tsinghua to manage their course information, assignment dues, and notifications by timely crawling data from the university's websites	

SKILLS

Programming languages: Python, C/C++, HTML/CSS/JavaScript, Matlab, Java

Tools: PyTorch, Caffe, TensorFlow, Robotics Operating System, Flask, Django, Qt, LaTeX