

ZHICHENG DING

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EDUCATION

Columbia University M.S in Computer Science , GPA: 3.67/4.00. Track: Machine Learning	New York, NY Expected May 2019
South China Normal University B.S. in Electronic Information Engineering , GPA: 3.47/5.00 (Top 3%), Dean's List	Guangzhou, CN 2016

RESEARCH EXPERIENCE

New York University, Multimedia and Visual Computing Lab Research Assistant - Advisor: Edward Wong <ul style="list-style-type: none">Designed a tracking-by-detection algorithm with classic and state-of-art approach to reach real-time multiple pedestrian tracking.Proposed a new approach of using probability trigger detection to achieve real-time online tracking.	New York, NY May 2018 - Present
Columbia University, DitecT (Data & innovative technology-driven Transportation) Lab Research Assistant - Advisor: Sharon Di <ul style="list-style-type: none">Designed a taxi game with reinforcement learning and deep reinforcement Learning to explore better trajectory.Model performs 58.3% more reward than real drivers and 80% more occupancy rate.Proposed a new approach to aggregate dynamic traffic setting to infer real information. (paper is in review)	New York, NY May 2018 - Aug 2018
Columbia University, Center for Computational Learning System (CCLS) Research Assistant - Supervisor: Albert Boulanger <ul style="list-style-type: none">Predicted 24-hours indoor temperature using LSTM and Bayesian model.Proposed a higher power polynomial loss function to capture pattern (weekly, monthly, yearly). (paper is in review)	New York, NY Jan 2018 - May 2018
South China Normal University, South China Academy of Advanced Optoelectronics Research Assistant - Advisor: Bin Zhou <ul style="list-style-type: none">Published a practice patent: Patent Number: ZL 2015 2 0015530.3. Issued date: 2015.05.20.Designed an efficient way to build an automated Internet of Things (IoT) system for lab management.Designed anti-theft, toxic detection, temp control system; the system has alerted and mitigated 138 accidents.	Guangzhou, CN Aug 2014 - Jan 2016

PROFESSIONAL EXPERIENCE

WellAV Software Development Engineer <ul style="list-style-type: none">Optimized compiling system in build server: on average, shorten build time from 27hrs to 5hrs.Developed main controller board and built compiling system for new 4K UHD product.	Huizhou, CN Mar 2016 - Jul 2017
Ericsson Software Development Engineer (Intern) <ul style="list-style-type: none">Assisted in the development of test automation system using deep learning.Conducted test report analysis and generation; this system has saved 10,000 man hours by 2017.	Guangzhou, CN Jul 2015 - Dec 2015

PROJECT EXPERIENCE

A real-time objects detection in cell phone camera base on MobileNets <ul style="list-style-type: none">Developed real-time objects detection system for webcam and cellphone camera.Implemented the state-of-art MobileNets which reaches 30 fps and recognizes 35 objects with accuracy 92.3%.	Apr 2017 - Feb 2018
Moving Object Tracking and Detecting <ul style="list-style-type: none">Developed system for tracking and detecting moving objects.Implemented Optical Flow with Corner Detection which shortens time complexity by 9.6% with acceptable accuracy.	Mar 2015 - May 2016

TECHNICAL SKILLS

Programming: Python, C/C++, Algorithm, Matlab
Machine Learning: Transfer Learning, Computer Vision, Large-scale time sequential modeling, Reinforcement Learning.