Che Shen

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EDUCATION

Columbia University	New York, NY
M.S. in Computer Science (Machine Learning Track)	Expected Dec 2018
Peking University	Beijing, China
B.S. in Mathematics, Major GPA: 95.5/100, Rank: 2/32	Sep 2013 – Jul 2017

TECHNICAL SKILLS

Programming Languages: C/C++, Python
Tools and Technologies: MongoDB, Git, Caffe, OpenCV

PROFESSIONAL EXPERIENCE

Momenta.ai   Beijing, China
Software Engineer Intern   Mar 2017–Aug 2017
- Participated in the program of developing sensing algorithm for autonomous vehicles, especially in detecting and tracking vehicles in images and video streams
- Wrote programs in Python and C++ for tracking vehicles in video streams
- Trained deep convolutional neural network using Caffe to distinguish and track vehicles
- Added layer definition to Caffe source code to implement new neural network structure
- Used MongoDB to store and query labeled data
- Proposed an evaluation dataset for vehicle detection and wrote a program in Python for evaluating detection results based on the evaluation script of Microsoft COCO dataset

Peking University, Software Engineering Laboratory   Beijing, China
Student Research Assistant   Aug 2016–Mar 2017
- Focused on software testing and debugging techniques, especially Spectrum-Based Fault Localization (SBFL) and Mutation-Based Fault Localization (MBFL)
- Wrote C++ programs to simulate the process of SBFL and to predict its accuracy
- Established a mathematical model for SBFL which explained some empirical results in previous papers
- Derived a lower bound of the expectation of the accuracy of SBFL, whose difference to 1 is exponentially decreasing with respect to the size of test set

PrinceTech Co.,Ltd   Beijing, China
Software Engineer Intern   Jun 2015–Jul 2015
- Participated in a project on developing an automated data analysis software
- Wrote programs to load data from databases (MySQL and Oracle) into Python

PROJECT EXPERIENCE

Online Assessing and Judging System   Beijing, China
Website for the Megcup2017 Programming Competition   Mar 2017-Apr 2017
- Implemented a new scoring algorithm for the competition
- Established the website using Flask module in Python and store the data with MongoDB

HONORS AND AWARDS

Math Competition
- First Prize in Chinese Mathematics Olympiad (CMO) (2013)
- Bronze Prize in Geometry, Shing-Tung Yau College Student Mathematics Contest, ranked 6th out of more than 600 competitors (2016)

Bridge Competition
- Championship in Asia Pacific Bridge Championships (2016)
- Runner-up in National Youth Bridge Competition (2017)

Scholarship
- FangZheng Scholarship, awarded to top 5% students in Peking University (2014)
- JiaNeng Scholarship, awarded to top 5% students in Peking University (2015)