JASON ZHICHENG DING

Homepage: http://zhichenglab.co/
Email: zd2212@columbia.edu
Phone: (646)575-6045

EDUCATION

Columbia University — New York, NY
M.S in Computer Science — Expected May 2019

South China Normal University — Guangzhou, CN
B.S. in Electronic Information Engineering, GPA: 3.47/5.00 (Top 3%), Dean's List — 2016

RESEARCH EXPERIENCE

Columbia University, Center for Computational Learning System (CCLS) — New York, NY
Research Assistant — Jan 2018 - Present

- Task: Use LSTM and MC dropout to predict the next 24 hours floor temperature.
- Achievement: Discovered weekly, monthly, seasonal pattern of the floor temperature. The RMSE of next 24 hours prediction reaches to 1.02 ± 0.09, compared to a vanilla LSTM neural network, our approach improve 25%.

South China Normal University, South China Academy of Advanced Optoelectronics — Guangzhou, CN
Research Assistant — Aug 2014 - Jan 2016

- Task: Design an efficient way to build an automated Internet of Things (IoT) system in lab.
- Achievement: Designed anti-theft system, toxic detection, auto-cooling system in three lab. The system has prevented four potential accident happen.

PROFESSIONAL EXPERIENCE

WellAV Technologies — Huizhou, CN
Software Engineer — Mar 2016 – Jul 2017

- Developed controller board (C++) and compiling system (Python) for new 4K UHD product.
- Optimized compiling system in build server: in average, shorten build time from 27hrs to 5hrs (Python).

Ericsson — Guangzhou, CN
Software Development Engineer (Intern) — Jul 2015 - Dec 2015

- Participated in the development of Test-Automation system based on deep learning: responsible to test report analysis and generation based on deep learning.
- This automated testing system has saved QA team for about 10000 man-hours by 07/2017.

PROJECT EXPERIENCE

Online PDF Reader Controlled by Gesture — Feb 2018 - Apr 2018

- Task: Controlling the PDF reader on switching pages, zoom in/out via body/finger gesture.
- Achievement: Develop a real time gesture recognition system which can reach 30 fps on camera capturing and the accuracy of controlling reach 92.3%.

Moving Object Tracking and Detecting — Mar 2015 - May 2016

- Task: Developed system on tracking and detecting moving objects.
- Achievement: Proposed an algorithm, which shortened computing time by 9.6% and increase the recognition accuracy by 17.2%, comparing to Lucas-Kanade Optical Flow algorithm.

Publication

1. Publication: Weipeng Hu, Zhihua Li, Zhicheng Ding. Traffic Emergency Guidance Gloves Based on ZigBee. Engineering Technology. 2015, 0 (8); 109-109.

Patents

1. Utility model patent: Bin Zhou, Zhicheng Ding, Chibin Kong, Changtao Lu, Sailing He. A Field Early-warning Wireless Monitoring System based on Fiber Grating Sensor. Patent Number: ZL. 2015 2 0015530.3. Issued date: 2015.05.20.
2. Copyright of Computer Software: Weipeng Hu, Zhicheng Ding. The Fractal Algorithm and Fractal Tree Software based on VC++ MFC. Patent Number: 2015SR156686. Issued date: 2015-08-13.