

# MING ZHOU

Passionate Software Engineering Leader

## EDUCATION

Columbia University, New York, NY

EXPECTED DEC. 2017

- M.S. in ELECTRICAL ENGINEERING • GPA: 3.5/4
- Coursework: Modern Serverless Cloud Apps, Cloud Computing & Big Data, Applied Machine Learning, Deep Learning & Neural Networks, Computer Architecture

Nanjing University of Information Science & Technology, Nanjing, China

JUNE 2016

- B.E. in ELECTRONIC SCIENCE & TECHNOLOGY • GPA: 3.92/4 • Outstanding Student Leader Award (Top 3%)

University of New South Wales, Sydney, Australia

AUG. 2014

- Exchange Program in COMPUTER ENGINEERING • GPA: 4.3/4

## EXPERIENCE & LEADERSHIP

Columbia University, Computer Science Department

NEW YORK, NY

GRADUATE TEACHING ASSISTANT FOR COURSE MODERN \*AS-A-SERVICE APPLICATION DEVELOPMENT

JAN. 2017 — PRESENT

- Work closely with Prof. Donald F. Ferguson on supervising and managing a class of 78 graduate students
- Receive high remarks for activities including office hours, tutorials to students and guidance to group projects
- Provide effective timely and appropriate feedback to students for maximized classroom delivery

Nanjing University of Information Science & Technology, Student Association for Science & Technology

NANJING, CHINA

CHAIR OF THE NETWORK INFORMATION DEPARTMENT

JUNE 2013 — OCT. 2014

- Founded COMPUTER HOSPITAL, helped over 500 clients resolve computer problems with a satisfaction rate over 99%
- Volunteered in more than 30 classes teaching computer languages, software tools and hardware skills

## PROJECTS

Intelligent Restaurant Ordering System based on Modern Serverless Web Technology

NEW YORK, NY

PROJECT MANAGER, TEAM LEADER

JAN. 2017 — PRESENT

- Adapt Agile methodology as the overall strategy from initial phase to ensure optimized development lifecycle
- Utilize various DevOps technologies to analyze and monitor code quality and guarantee continuous delivery
- Train a front-end team to adapt cutting-edge technologies including Service Worker, Webpack, Karma and Protractor
- Design and implement a Microservices based serverless cloud system running on AWS Lambda Platform
- Create high performance, full-bodied and flexible database schemas on MySQL database hosted on AWS RDS Platform
- Deploy a set of HATEOAS-enabled RESTful APIs with the help of Swagger for efficient and robust data exchange

IoT based Smart Grocery Store Management System

NEW YORK, NY

TEAM LEADER

SEPT. 2016 — DEC. 2016

- Designed and implemented Neural Networks for predicting the most profitable stocking plan continuously
- Built an intelligent monitoring and auto-adjusting system for optimized storage for produce and goods
- Developed both business-side and client-side apps for web and major mobile platforms including Android and iOS
- Presented the project to store managers from different areas, received great interests and positive feedback

Neural Network based Automatic Self-Calibrating System for Physical Sensors

NANJING, CHINA

INDEPENDENT

MAR. 2016 — JUNE 2016

- Optimized Levenberg-Marquardt Algorithm with the full-scale error for calibrated results drop to below 0.006%
- Designed and built a novel portable and powerful self-calibrating platform for various physical sensors
- Implemented both Neural Network and its training and storing system for web and major mobile platforms

Wireless Manipulator Controlling System based on Human Body Status Recognition

NANJING, CHINA

PROJECT MANAGER, TEAM LEADER

OCT. 2014 — JUN. 2015

- Developed body status recognizing system based on Neural Networks, resulted in an error rate down to 0.02%
- Adapted Cam-Shift Algorithm to process color and depth images for tracking all 10 fingers in real time
- Won 1<sup>st</sup> prize of 2014 Open-Lab Project Contest of NUIST (Top 0.8%)
- Published 2 national patents: 201521106094.7, 201521076162.X and 2 software copyrights: 2015R11L428138, 2015R11L428159

Exam Information Validating System based on B/S Framework

NANJING, CHINA

TEAM LEADER

MAY 2013 — NOV. 2013

- Implemented the front-end and back-end with sophisticated technologies, achieved a user satisfaction rate over 95%
- Optimized connection routing system, served almost 5 years steadily for over 20,000 entries per exam
- Inspected and improved database storing, fetching logic and accomplished a 350x boost on the overall performance
- Published 1 software copyright: 2014SR068177

## PUBLICATIONS

- Ming Zhou, Qingquan Liu, and Yachen Zhu, "A Self-Calibrating Approach for Piezoresistive Pressure Sensor using Neural Network," *Annual Conference of IEEE Industrial Electronics Society*, (In submission).
- Wei Fang, Xuezhi Wen, Yu Zheng, and Ming Zhou, "A Survey of Big Data Security and Privacy Preserving," *IETE Technical Review*, 2016.
- Xiaoyu Li, Ming Zhou, Xiaotong Yuan, Qingshan Liu, and Qi Luo, "Parallel Estimation of Gaussian Model based on Nearby Choice from Downwards Coordinates," *Journal of Nanjing University*, 2016.

## SKILLS

PROGRAMMING LANGUAGES: C#, Java, Python, HTML, CSS, JavaScript, TypeScript, SQL, C, C++, F#, Lua, Assembly Language, LaTeX  
TECHNICAL TOOLS: Spark, Mahout, Hadoop, Hive, Hbase, Numpy, Scipy, Scikit-Learn, Theano, Accord.NET, AWS, Matlab  
LANGUAGES: Chinese (Native), English (Fluent)