

MING ZHOU

Passionate Software Engineering Leader

EDUCATION

Columbia University, New York, NY

EXPECTED DEC. 2017

• M.S. in ELECTRICAL ENGINEERING • GPA: 3.5/4

• Featured Coursework: Modern Serverless Cloud Apps, Cloud Computing & Big Data, Applied Machine Learning

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(*AAS) 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

Dynamic Twitter Streaming Content Analyzing and Delivery System (Team Leader)

NEW YORK, NY

AWS Kinesis, S3, ElasticSearch, Elastic MapReduce, DynamoDB, SNS, SQS, Lambda, Elastic Beanstalk, NodeJS, ExpressJS

MAR. 2017 — PRESENT

- Design and implement a streaming content indexing and analyzing system using AWS Kinesis, S3 and ElasticSearch
- Configure intelligent content learning and trend finding system with AWS Elastic MapReduce and DynamoDB
- Adapt a dynamic messaging routing and queuing strategy using AWS SNS, AWS SQS and AWS Lambda
- Develop an automated robust back-end system on Elastic Beanstalk using NodeJS with ExpressJS and TypeScript

Intelligent Restaurant Ordering System based on Modern Serverless Web Technology (Team Leader)

NEW YORK, NY

Agile, DevOps, AWS, MicroService, RESTful API, NodeJS, CDN, TravisCI, WebPack, Karma, MySQL, C#, .NET Core

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 (Team Leader)

NEW YORK, NY

Deep Learning, AngularJS, Ionic, Cordova, TypeScript, NodeJS, Android, Java, IoT, Raspberry Pi, Mono, C#, ORM, SQLite

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

Neural Network based Automatic Self-Calibrating System for Physical Sensors (Independent)

NANJING, CHINA

Deep Learning, Android, Java, AngularJS, Ionic, Cordova, TypeScript, NodeJS, IoT, Raspberry Pi, Mono, C#, ORM, SQLite

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 (Team Leader)

NANJING, CHINA

Machine Learning, Deep Learning, Android, Java, OpenCV, IoT, Raspberry Pi, .NET, WPF, C#, ORM, SQLite

OCT. 2014 — JUN. 2015

- Won 1st 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 (Team Leader)

NANJING, CHINA

BootStrap, AngularJS, NodeJS, JavaScript, TypeScript, ASP.NET, C#, ORM, MsSQL

MAY 2013 — NOV. 2013

- Implemented the front-end and back-end with sophisticated technologies, served the university steadily for 5 years
- 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.

TECHNICAL SKILLS

LANGUAGES: C#, Java, Python, HTML, CSS, JavaScript, TypeScript, SQL, C, C++, F#, Lua, Assembly Language, LaTeX

TOOLS: AWS, NodeJS, Cordova, Spark, Hadoop, TravisCI, Numpy, Scipy, Scikit-Learn, Theano, Accord.NET, Matlab, IoT