

Ing  ${f Z}$ hou sionate Software Engineering Leader

**EDUCATION** 

EXPECTED DEC. 2017 Columbia University in the City of New York

New York, NY

M.S. in Electrical Engineering

Nanjing University of Information Science & Technology **JUNE 2016** 

Nanjing, China

• B.É. in Electronic Science & Technology • GPA: 90.1/100 (3.92/4)

• Outstanding Student Leader Award (Top 3%)

University of New South Wales Aug. 2014

Sydney, Australia

• Exchange Program in Computer Engineering • GPA: HD (A+)

# PROJECT EXPERIENCE

SEPT. 2016 — PRESENT

#### Intelligent TV Series Delivery System based on Modern Serverless Framework

New York, NY

- Direct requirements break down for choosing the best technique combination and practice TEAM LEADER
  - Design and implement a serverless cloud delivering system running on AWS Lambda Platform
  - Adapt full-bodied yet flexible data set structures on Non-Relational database DynamoDB
  - Deploy a set of RESTful APIs with the help of Swagger for efficient and robust data exchange

JULY 2015 — JUNE 2016

INDEPENDENT

Neural Network based Self-Calibrating System for Piezoresistive Pressure Sensor

- Evaluated LSF, SVM and Neural Network to determine the best fit for calibrating sensor data
- Optimized Levenberg-Marquardt Algorithm with the full scale error down to below 0.006%
- Designed and built a novel portable yet powerful self-calibrating system for sensors
- Implemented Neural Network training and serializing system for major mobile platforms

MAY 2015 — Oct. 2015

## **IoT based Responsive Living Environment Monitoring System**

 Applied Optical Flow Algorithm for rapidly detecting and tracking human body movements INDEPENDENT

- Designed a high-precision (within 10cm) indoor locating system using RFID Technology
- Utilized Retinex Algorithm for pre-processing and enhancing video and image frames
- Submitted 1 patent: China (Pending)

Oct. 2014 — Nov. 2015

TEAM LEADER

Wireless Manipulator Controlling System based on Human Body Status Recognition Nanjing, China

- Developed body status recognizing system using Neural Network (error rate down to 0.02%)
- Adapted Cam-Shift Algorithm to process color and depth images for tracking all 10 fingers
- Utilized CHAP for robust and rapid connection with multiple manipulators at the same time
- Won 1st prize of 2014 Open-Lab Project Contest of NUIST (Top 0.8%)
- Published 2 software copyrights: China: 2015R11L428138, China: 2015R11L428159
- Published 2 patents: China: 201521106094.7, China: 201521076162.X

May 2013 — Nov. 2013

#### Exam Information Validating System based on B/S Framework

Nanjing, China

- Implemented the frontend and backend, accomplished a user satisfaction rate over 95% TEAM LEADER
  - Optimized connection routing system, served over 3 years for 20,000+ entries per exam
  - Improved database storing and fetching logic achieved much better performance (350x faster)
  - Published 1 software copyright: China: 2014SR068177

# LEADERSHIP & EXTRACURRICULAR ACTIVITIES

Chair of the Network Information Department JUNE 2013 — OCT. 2014

Nanjing, China

- **NUIST STUDENT ASSOCIATION FOR SCIENCE & TECHNOLOGY**
- Founded Computer Hospital served over 500 clients, with a satisfaction rate over 99%
- Volunteered in 30+ classes teaching computer languages, software and hardware
- Led 25 members to develop a website for association affairs with cutting-edge technologies

#### **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.
- Chuan He, Ming Zhou, and Xiaoyan Chen, "Robust Frequency Invariant Beamforming Algorithm based on Linear Constrained Minimum Variance Diagonal Loading Method," Journal of Nanjing University of Information Science & Technology (Natural Science Edition), 2016.

### SKILLS & INTERESTS

Technique C#, Java, Python, HTML, CSS, JavaScript, TypeScript, C++, Lua, SQL, LATEX, Verilog, VHDL, Assembly Language

Hadoop, Hive, Hbase, AWS, Matlab, Intellij IDEA, Visual Studio, Photoshop, InDesign, Audition, Office SOFTWARE

English (Fluent), Chinese (Native) LANGUAGE

Programming, Photography, Audio Editing, Video Making, Biking, Travelling, Volunteer Teaching INTEREST