

# Zhuoyue Xing

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## Education

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### Columbia University

New York, NY

M.S. in Electrical Engineering, GPA 3.67/4.3

*Sep 2019 – Expected Dec 2020*

Scholarships: Nikola Tesla Electrical Engineering Scholar (scholarship of \$2500)

### Xi'an Jiaotong University (XJTU)

Xi'an, CN

B.Eng in Automation, GPA 3.7/4.3

*Sep 2015 – Jun 2019*

Scholarships: XJTU Siyuan Academic Scholarship, XJTU Outstanding Student Award

## Research Projects

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### Columbia University

#### Signaling the Health of Tree-pit Soil

*Oct 2019 – Dec 2019*

- ♦ Transfer data from sensors nodes into center node using LoRa technology.
- ♦ Built a database system in AWS server with Python, using MongoDB to post, get, save and download data, and to send alert e-mail when the system receives abnormal data.
- ♦ Formulated a SVM model with Python in AWS server which can distinguish the data from different sensors nodes and send alert e-mail when the sensors nodes is wrong.

#### Build smart watch system on ESP8266 chip

*Sep 2019 – Nov 2019*

- ♦ Interface with the OLED display to display the time and allow users to set the time and set a alarm using mircopython.
- ♦ Built a MongoDB database service hosted on an Amazon AWS server to deal with accelerometer sensor data connected with the ESP8266, and access it using HTTP commands on the ESP8266.
- ♦ Trained a neural network model which can recognize different letter gestures of the smart watch in server with accelerometer sensor data and display the result on OLED display, achieving a correct rate of more than 90%.

### Xi'an Jiaotong University

#### Study on Quantitative Investment Model and Volatility of Financial Market Based on the Stochastic Process and Machine Learning

*May 2017 – May 2018*

- ♦ Crawled on over 200,000 records in financial website for the last 4 years, carried out data preprocessing and extracted key words
- ♦ Built a neural network with Python library TensorFlow based on stock price and market trend from June 2017 to August 2017
- ♦ Formulated a model to predict the stock market trend from September 2017 to December 2017 and achieved an annualized return of 62%

## Skills/Others

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**Programming languages:** Python, Matlab, C/C++, SQL, R

**Tools:** AutoCAD, Spark, LabVIEW, MongoDB, MySQL, TensorFlow, Redis