

# Zhuo Wang

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## EDUCATION BACKGROUND

**University of California, Santa Cruz (UCSC)**, Santa Cruz, USA 2016-2018 Expected

- Master of Science, Computer Engineering

**Beijing University of Posts and Telecommunications (BUPT)**, Beijing, China 2012-2016

- Joint program between BUPT and Queen Mary University of London, Bachelor of Engineering, Telecommunication Engineering.

**Queen Mary University of London (QMUL)**, London, UK 2012-2016

- Joint program between BUPT and Queen Mary University of London, Bachelor of Engineering, Telecommunication Engineering.
- IET Student Membership

## TECHNICAL SKILL

- Java, C, HTML, Python, D3.js, CSS, MATLAB, MySQL

## PROJECT

**Web-crawler and D3.js Visualization** 01/2017 to 03/2017

- Building a dynamic visualization for salary data and house price data to help new grad evaluate their house purchases plan
- Designed a multithread web-crawler with master/slave model to acquire housing price and salary data from multiple sources. And implemented the web-crawler with Scrapy and BeautifulSoup and established a database with SQLAlchemy and MySQL
- Completed a web visualization with Scipy, jQuery and D3.js

**OpenCV project** 09/2016 to 12/2016

- Using Python and OpenCV to implement plane-sweeping Multiview stereo, which includes camera calibration, finding computer essential matrix (select candidate point by graph feature), finding extrinsic parameters, rescaling the translation vectors
- Using python and OpenCV to implement High Dynamic Range(HDR) system

## WORK EXPERIENCE

**North China Institute of Computing Technology**, Intern in R&D Department of Computer and Communication Technology, research assistant 07/2015 to 09/2015

*Join the 'Wireless Mesh Network' project*

- Design and implement the node status control protocol module, which is the main control module in the mesh network protocol sub-system

**Chinese Academy of Sciences**, Intern in the Key Laboratory of Spatial Information Processing and Applied System, research assistant 01/2016 to 03/2016

*Join the 'Sensing earth observation and scene classification of surface features' research*

- Assisting researcher to establish segmentation and classification features, as well as apply decision-making methods, based on the surface features of suburbs and rural areas
- Assisting researcher to determine the typical target chip extraction knowledge base and conduct research on universal decision-making methods of surface features classification

## RESEARCH

**Information and Electronic Technology Laboratory of BUPT** 03/2016 to 06/2016

*Complete the "Wireless Sensor Networks Topology Evolution based on Scale-Free Network Model" research*

- Introducing the scale-free network research method into the traditional wireless sensor network, a new topology evolution model based on scale-free network is proposed by improving the former researcher's model
- Solving the deficient performance problem on fault tolerance and energy efficiency of the traditional wireless sensor network topology evolution models by introduce scale-free network model