# **Baixiang HUANG**

932 South Lushan Road, Changsha, Hunan, P. R. China (+86) 150-8472-3569 baixianghuang.com bxhuang@csu.edu.cn

#### **EDUCATION**

# Bachelor of Engineering, Computer Science and Technology

Central South University

Hunan, China Expected July 2019

Qinghai Huangchuan High School

Qinghai, China Graduated 2015

## RESEARCH EXPERIENCE

**Central South University** 

Hunan, China

Undergraduate Researcher

March 2018 – Present

- Modeled communications among smart sensors, data carriers and data centers. Programmed in Java.
- Proposed three schemes to optimize the deployment of data centers using a machine learning approach (unsupervised clustering). Programmed in Python.
- Analyzed and evaluated the proposed schemes based on two datasets of real-life traffic data. Visualized in MATLAB.

Undergraduate Researcher

February 2017 – March 2018

- Simulated the behavior of content routers, users, sensors and data centers. Programmed in Java.
- Proposed an algorithm to optimize the placement of data packets.
- Designed an algorithm to make use of idle content routers' storage capacity.
- Designed two shortcut methods to reduce the length of routing paths.
- Evaluated delay, cache hits and total processed packets of the proposed schemes in comparison with five existing schemes.

Research Assistant

August 2016 – February 2017

- Generated and organized ten million records of student information using the Oracle Database.
- Organized and analyzed a dataset containing fifty million records using Spark.

### **PUBLICATIONS**

2- Huang B, Liu A, Liu W, et al. Deployment Optimization of Data Centers in Vehicular Networks[J]. Accepted by IEEE Access, DOI: 10.1109/ACCESS.2019.2897615.

1- <u>Huang B, Liu A, Zhang C, et al. Caching Joint Shortcut Routing to Improve Quality of Service for Information-Centric Networking[J]</u>. Sensors, 2018, 18(6): 1750.

### **HONORS**

Captain of the school's soccer team, 2015

Second prize in the final of National Secondary School Mathematic Competition, 2012

Third prize in the final of Hua Luogeng Golden Cup Youth's Invitational Mathematic Competition, 2010

## SERVICE AND LEADERSHIP

#### No. 11 Middle School

Volunteer Teacher

Qinghai, China

July 2015 – Present

- Teach mathematics and answer questions.
- Aid other teachers on coursework and grade homework.

# **Local Community**

Qinghai, China

Initiator of a Campaign

July 2016 – August 2016

- Discovered the high prevalence of endemic gallstones after an investigation.
- Inferred the cause was high-cholesterol diet.
- Ran the campaign to educate residences.

# Yongzhe Mountaineering Club

Qinghai, China

Founder

October 2013 – August 2015

- Organized weekly training.
- Looked for potential patrons and secured sponsorships from a local business.
- Reached the summits of seven mountains including Mount Guerbanbao (5,632 meters).

#### SKILLS AND INTERESTS

- Java, Python, SQL, R
- Oracle Database, Linux, Hadoop, MATLAB, Boson NetSim, Multisim
- Tutored local high school students in mathematics and English for three years
- Designed a mascot for an environmental organization, developed three websites for individuals and a club
- Traditional Chinese painting, Mountaineering, Snowboarding, Soccer, Swimming