ZHIYUAN WANG

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EDUCATION

School of Informatics, Xiamen University (XMU) *2017.9 - expected in 2021.6*
B.Eng. in Computer Science (GPA: 3.39/4.0, Upper GPA: 3.67/4.0)
Minor in Economics

RESEARCHES

(Funded by Undergraduate Discipline Construction Funding of XMU)

- Intern in Fujian Key Laboratory of Sensing and Computing for Smart City (SCSC Lab.)

Data-Driven Hospital Patient Flow Modeling, Prediction, and Scheduling *2019.9 - Present*
Manager | SCSC Lab, XMU *Advisor: Longbiao Chen, Dingqi Yang*
• Two papers (I work as first author) are respectively accepted by GPC2020 and on submission to Ubicomp2020.

Baidu-XMU Joint Research on the Spread of the COVID-19 Epidemic *2020.1 – Present*
Core Researcher | Big Data Lab, Baidu & SCSC Lab, XMU *Advisor: Haoyi Xiong, Longbiao Chen*
• Build two epidemic spreading prediction models with Tensorflow and PaddlePaddle leveraging the human mobility data cooperating with Baidu Research Institute, and open-source the code and visualization platform.
• This work is orally reported in the 2020 Baidu World Conference by Baidu Research Institute as one of three highlight applications against COVID-19.

Impact of Human Mobility Analysis on the Spread of the COVID-19 Epidemic *2020.1 – Present*
Core Researcher | SCSC Lab, XMU & CCNT Lab, ZJU *Advisor: Longbiao Chen, Gang Pan, Qiyuan Li*
• By analyzing the time-lag cross-correlation between the spread of the COVID-19 epidemic and multiple factors, we estimate the probable effectiveness of different public health interventions, such as lockdown and city-wide quarantine, and interpret the spread of the epidemic basing on our findings and discussions.

Crowdsensing and GNN Based Bike Sharing System Optimization *2019.7 - 2019.10*
Member | SCSC Lab, XMU *Advisor: Longbiao Chen*
• A paper (I work as third author) is on submission to the IEEE Systems Journal.

COMPLETED THESISES

(Accepted) **Zhiyuan Wang**, Ruiying Guo, Linghong Hong, Cheng Wang, Longbiao Chen*, Demand-Responsive Windows Scheduling in Tertiary Hospital Leveraging Spatiotemporal Neural Networks, The 15th International Conference on Green, Pervasive and Cloud Computing (GPC2020)

(On Submission) **Zhiyuan Wang**, Shang Shi, Dingqi Yang, Qiyuan Li, Xiaoliang Fan, Binbin Zhou, Jianying Wu, Longbiao Chen*, Cheng Wang, Will you see an overcrowded hospital? Modeling Hospital Emergency Patient Flow Using Open Government Data, submitted to Ubicomp2020 in Aug 2020

(On Submission) Ruiying Guo, Zhihan Jiang, **Zhiyuan Wang**, Hong Hong, Zhiyong Yu, Weijie Zhang, Longbiao Chen*, Cheng Wang, RedPacketBike: Deep Bike Demand Forecast and Crowd-Driven Station Rebalancing for Bike Sharing Systems, submitted to IEEE System Journal in Feb 2020

(China Patent) Longbiao Chen, Ruiying Guo, Zhihan Jiang, **Zhiyuan Wang**, Cheng Wang. A Method for Bike Demand Prediction and Scheduling Based on Deep Learning and Crowd Sensing. China Patent 202010599191.3.

ACADEMIC ACTIVITIES

Advanced Computing and System Lab. (CCNT), Zhejiang University *Remote Intern, 2020.4 - Present*
"Internet of Things: System and Security" Summer School, Zhejiang University *Short-Term Learning, 2019.6*
CSCW and Social Computing Summer School, Fudan University *Online Learning, 2020.8*
The 15^{th} International Conference on Green, Pervasive and Cloud Computing *Paper Presentation, 2020.9*
The 16^{th} Joint Conference on Harmonious Human-Machine Environment *Volunteer, 2020.10*

MAJOR HONORS AND AWARDS

COMAP's Mathematical Contest in Modeling *Meritorious Winner, 2020.1*
Team Leader | Project: Data Mining on Amazon Online Product Reviews *(Top 6% in the World)*
China Collegiate Computer Design Competition (Big Data Track) *National Second Prize, 2019.7*
Team Member | Project: Information Extraction in Cancer Electronic Medical Record *(Top 2% in China)*
Scholarship for the 99^{th} Anniversary of Xiamen University *2019.4*
Scholarship for Outstanding Academic Performance *every year in XMU*
Undergraduate Discipline Construction Funding of XMU (60000 rmb) *since 2020.3*

SKILLS AND QUALIFICATIONS

Language: English (**TOEFL iBT 107** |Reading 29, Listening 28, Speaking 22, Writing 28), Chinese (Native)
Programming: Python, Java, C++, SQL, Shell, HTML/CSS/JavaScript
Tools: Tensorflow, Pandas, Keras, Neo4j, Numpy, Matplotlib, Seaborn