ZHIYUAN WANG

+86-13256687856 ⋄ wwzzyy9982@gmail.com ⋄ Xiamen, China

EDUCATION

School of Informatics, Xiamen University   *2017.9 - Present*
B.E. in Computer Science (GPA: 3.38/4.0, Upper GPA: 3.67/4.0)
Minor in Economics
Member of Fujian Key Laboratory of Sensing and Computing for Smart City
Major Honors and Awards:
- 2019 Scholarship for the 99th Anniversary of Xiamen University
- 2019 'Furong' Scientific Research Scholarship
- 2017, 2018, 2019 Scholarship for Outstanding Academic Performance

RESEARCHES AND INTERNSHIPS

A Crowdsensing and Graph Neural Network Based Bicycle Scheduling   *2019.7 - 2019.10*
Research Trainee   *Xiamen, CN*
· We propose a crowdsensing trend-based framework to accurately predict over-demand stations in bike-sharing systems based on trend and effectively incentivize the users to help rebalancing bike based on the needs of the real world.
· A paper "A Crowdsensing Approach to Rebalancing Bike Based on Trend" is on work.

Spacialtemporal Neural Network Based Hospital Windows Scheduling   *2019.11 - Present*
Project Manager   *Xiamen, CN*
· We propose a spatiotemporal graph neural network (ST-GNN) model to accurately model and forecast the fine-grained hospital visit demand from real-world human mobility data. Then exploit an effective hospital windows scheduling strategy using queuing theory.
· A paper "Demand-Responsive Windows Scheduling in Tertiary Hospital Leveraging Spatiotemporal Neural Networks" has been published in The 15th International Conference on Green, Pervasive and Cloud Computing (GPC2020).

Baidu-XMU Joint Research on the Spread of the COVID-19 Epidemic   *2020.1 - Present*
Key Researcher   *Jinan, CN*
· I proposed two deep learning models using Tensorflow to realize the epidemic spreading prediction respectively leveraging the human mobility big data provided by Baidu data federation.
· A visual interface was published to show the prediction results, and the models' code has been open-source on my own Github with Baidu and XMU's permission.
· Working with the industrial company requests a normative collaboration and strict code format, which improved my coding skills and adaptable capabilities.

Statistics and Epidemiology Based Research on the Impact of Human Mobility on the Spread of the COVID-19 Epidemic   *2020.1 - Present*
Key Researcher   *Jinan, CN*
· By analyzing the correlation between the Spread of the COVID-19 and multiple factors, we estimated the probable effectiveness of different public health interventions, such as epicenter lockdown and city-wide quarantine. And we interpret the the spread of the COVID-19 epidemic bases on our findings and discussions.
· A paper "Impact of Human Mobility on the Spread of the COVID-19 epidemic in China: a descriptive study" is on work.

PROFESSIONAL ACTIVITIES

Internet of Things (IoT) Summer School in Zhejiang University *2019.6*
Participator *Hangzhou, CN*

· I attended top-level reports on IoT and ubiquitous computing (Ubicomp) for a week.
· I accessed to some fancy ideas about the application of deep learning in Internet of things, such as 'throat mic' and 'Wi-Fi sensing', and reproduce an "Wi-Fi CSI and Machine Learning Based Adaptive Intrusion Detection Alarm" in my computer network class project, and got 95 points.

COMPETITIONS

China Collegiate Programming Contest (CCPC) - Big Data Challenge *2019.6*
Team Member *Beijing, CN*

· Project: Information Extraction of Electronic Medical Record of Cancer (**Second prize of National**)
· We proposed a word co-occurrence rate based algorithm and build a web interface for the database, which reaches the goal of extracting the information of cancer medical record text with high accuracy.
· Skills used: Nature Language Processing, Statistical Methods Modeling, Text Extraction.

China Undergraduate Mathematical Contest in Modeling (CUMCM) *2019.8*
Team Lead *Xiamen, CN*

· Project: A Data-Driven Airport Taxi Scheduling Model (**First prize of Fujian province**)
· More details.
· Skills used: Taxi Data Mining, Spatiotemporal Statistical Analysis.

KPMG Ideation Challenge *2019.11*
Tech Lead *Xiamen, CN*

· Project: BestFit - An Awesome Patent Knowledge Graph (**Top 10 of Xiamen University**)
· We developed a global patent knowledge graph for some industries and achieve a market analysis case assisting a company in Xiamen City making decisions.
· Skills used: Knowledge Graph, Web Crawler, Nature Language Processing.

COMAP's Mathematical Contest in Modeling (MCM) *2020.1*
Team Lead *Xiamen, CN*

· Project: Data mining on Amazon Online Product Reviews (**Award will be announced soon**)
· More Details.
· Skills used: Machine Learning, Statistical Methods Modeling, Data Mining, Time Series Analysis.

ON-CAMPUS ACTIVITIES

Key Player of School of Informatics Football Team in Xiamen University *2017.9 - Present*

I play more than ten football matches on behalf of my college every semester. Especially, our team won the championship of the school league of Xiamen university in 2019, and I was the top scorer of the team this season.

Summer Social Practice on Urban Development Research in 2018 *2018.7 - 2018.8*