Zhenyi Wang

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Taipa, Macau, China

EDUCATION

University of Macau Aug 2021

State Key Laboratory of Internet of Things for Smart City

PhD student

Sichuan University Sep 2017 - Jun 2021

Cybersecurity Bachelor Chengdu, Sichuan, China

- GPA: 3.71 / 4.0
- Honors/Awards: Sichuan University Comprehensive Third-Class Scholarship(2019)
- Relevant Coursework: Data Structures and Algorithms(90), Introduction to Artificial Intelligence(90), Computer Communication and Network(93)

Publication

Journal paper

- **Z. Wang**, P. Yu, and H. Zhang, "Privacy-Preserving Regulation Capacity Evaluation for HVAC Systems in Heterogeneous Buildings based on Federated Learning and Transfer Learning" IEEE Transactions on Industrial Informatics. (under review)
- Y. Wang, **Z. Wang**, C. Li, Y. Zhang, and H. Wang, “A multitask deep learning approach for user depression detection on sina weibo,” IEEE Transactions on Cybernetics. (under review)

Conference paper

- Y. Wang, **Z. Wang**, C. Li, Y. Zhang, and H. Wang, “A multimodal feature Fusion-Based method for individual depression detection on sina weibo,” 2020 IEEE 39th International Performance Computing and Communications Conference (IEEE IPCCC 2020), Austin, USA, Nov. 2020.

RESEARCH EXPERIENCE

Short-term renewable energy forcasting based on emsemble learning Aug 2021 - Oct 2021

- the first prize in the algorithm track and the only Best Innovation Award at a national competition on artificial intelligence (AI) application in power dispatching
- Responsible for data pre-processing, feature engineering, model training and deployment, etc.

Social Media Depression Anomaly Detection Mar 2020 - Aug 2020

- According to the various behaviors of users in social media, using abnormal detection methods to find users with a tendency to depression
- Responsible for data analysis, feature selection, and the establishment and optimization of detection models

Smart Grid Anomaly Detection Sep 2020 - Jun 2021

- Based on grid data, conduct behavior analysis and modeling on user data, select anomaly detection methods, establish a detection model, and find users with abnormal behavior

PROJECT EXPERIENCE

Wi-fi positioning based on machine learning Sep 2019 - Jan 2020

- Clean and process the collected data
- Use KNN for model training and try to get the best K value
- Use neural network to determine parameters

Image recognition of malicious webshell based on CNN Oct 2019 - Jan 2020

- Convert malicious Webshell into a fixed-length grayscale image
- Use multiple classification models for training
- Visualize training results and make model selection

MISCELLANEOUS

- **Coding:** Familiar with Python, Numpy, Pandas, scikit-learn, Pytorch
- **Machine Learning:** Familiar with the common machine learning algorithms and the principles of deep learning
- **Research Interests:** Anomaly detection, Smart grid, Data analysis, Graph neural network