QINFENG XIAO

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Education

Beijing Jiaotong University   Sep. 2018 – Jun. 2021
MEng of Computer Science (GPA 3.67/4.0; Supervised by Prof. Jing Wang)   *Beijing, Haidian District*

North University of China   Sep. 2014 – Jun. 2018
BEng of Process Equipment and Control Engineering   *Shanxi, Taiyuan*

Publications

- Jianan Ye*, **Qinfeng Xiao***. *CoSleep: A Multi-view Representation Learning Framework for Self-Supervised Learning of Sleep Stage Classification.* IEEE Signal Processing Letters, 2021 (JCR-Q1). (* equal contribution)

- **Qinfeng Xiao**. *Self-Supervised Learning for Sleep Stage Classification with Predictive and Discriminative Contrastive Coding.* ICASSP 2021 (CCF-B).

- **Qinfeng Xiao**. *Unsupervised Anomaly Detection with Distillated Teacher-Student Network Ensemble.* Entropy, 2021 (JCR-Q2).

- Yunxiao Liu, Youfang Lin, **Qinfeng Xiao**. *Self-adversarial Variational Autoencoder with Spectral Residual for Time Series Anomaly Detection.* Neurocomputing, 2021 (JCR-Q1).

- **Qinfeng Xiao**. *Memory-augmented Adversarial Autoencoders for Multivariate Time-series Anomaly Detection with Deep Reconstruction and Prediction.* ArXiv, 2021.

- Jing Tang, **Qinfeng Xiao**. *Simulation of Proton-Induced DNA Damage Patterns Using an Improved Clustering Algorithm.* Radiation Research, 2020 (JCR-Q1).

Work Experience & Projects

Xiaomi Inc. – IoT Department (Wearable Devices)   July 2021 – present
Machine Learning Engineer – Sports & Healthcare Algorithm   *Beijing, Haidian District*

- I'm responsible for developing state-of-the-art algorithms of real-world problems applied on wearable devices, including:
  - energy expenditure prediction based on Transformer and Multi-task Learning;
  - gesture recognition based remote TV controlling;
  - fall detection with wearable device sensors;
  - smart fitness assessment;
- I gained rich experiences of integrating machine learning solutions on embedding devices, project management and teamwork collaboration.

PyADTS   April 2021 – present
A Time-series Anomaly Detection Toolkit by PyTorch   *Beijing, Haidian District*

- A Python toolkit aimed at accelerating the workflow of time-series anomaly detection for researchers.

Teaching Assistant   September 2019 – December 2019
Machine Learning for Undergraduates   *Beijing, Haidian District*

- I'm responsible for assisting machine learning courses teaching, holding recitation and designing coding assignments.

Honors & Awards

- Outstanding graduate thesis award of Beijing Jiaotong University (2021)

- First-class scholarship of Beijing Jiaotong University (2020 & 2021)

Academic Services

I reviewed papers for the following journals:

- *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*

- *Physics in Medicine and Biology*

- *Scientific Reports*

Skills

Programming: C, C++, Python, Matlab, with practical experiences
ML/DL Frameworks: Scikit-learn, PyTorch, with practical experiences
Languages: English, Chinese Mandarin (native)