

Education

- 2019– **University of New South Wales**
Ph.D. in Computer Science and Engineering supervised by Scientia Assoc. Prof. [Lina Yao](#).
- 2016–2019 **Tongji University**
M.Eng. in Control Science and Engineering supervised by Prof. [Qi Kang](#). GPA: 4.46/5.0.
- Term1 2015 **Royal Melbourne Institute of Technology**
Exchange Program. GPA: 4.0/4.0.
- 2012–2016 **Nanjing University of Aeronautics and Astronautics**
B.Eng. in Mechanical Engineering and Automation. GPA: 3.8/5.0.

Experience

- 2018 **PayPal** · Software Engineer Intern (4 months) · Shanghai
Improving anomaly detection algorithms for Fin-tech models. Experimented with Fast Fourier Transforms (seasonality detection), Isolation Forest (anomaly detection) and LSTM (sequential prediction).

Publications

- **Meta Latent Neural Processes for Uncertainty Estimation over Evolving Data Streams.** Xuesong Wang*, Lina Yao, Xianzhi Wang, Hye-young Paik, and Sen Wang. In *IEEE Transactions on Neural Networks and Learning Systems*, TNNLS 2022. (Under review).
- **Global Convolutional Neural Processes.** Xuesong Wang*, Lina Yao, Xianzhi Wang, Hye-young Paik, and Sen Wang. In *IEEE International Conference on Data Mining, ICDM 2021*. (*Best Paper Candidate). [↗](#)
- **NP-PROV: Neural Processes with Position-Relevant-Only Variances.** Xuesong Wang, Lina Yao*, Xianzhi Wang, Feiping Nie and Boualem Benatallah. In *International Conference on Web Information Systems Engineering, WISE 2021*. [↗](#)
- **Mobility Irregularity Detection with Smart Transit Card Data.** Xuesong Wang*, Lina Yao, Wei Liu, Can Li, Lei Bai, and S. Travis Waller. In *Pacific-Asia Conference on Knowledge Discovery and Data Mining, PAKDD 2020*. [↗](#)
- **Multiscale Drift Detection Test to Enable Fast Learning in Nonstationary Environments.** XueSong Wang, Qi Kang*, MengChu Zhou, Le Pan, and Abdullah Abusorrah. In *IEEE Transactions on Cybernetics 2020*. [↗](#)
- **Predicting Heat Transfer of Oscillating Heat Pipes for Machining Processes based on Extreme Gradient Boosting Algorithm.** Ning Qian, Xuesong Wang, Yucan Fu, Zhengcai Zhao, Jiuhua Xu, and Jiajia Chen. In *Applied Thermal Engineering 2020*. [↗](#)
- **Drifted Twitter Spam Classification Using Multiscale Detection Test on K-L Divergence.** Xuesong Wang, Qi Kang*, Jing An, and Mengchu Zhou*. In *IEEE Access 2019*. [↗](#)
- **A Distance-based Weighted Undersampling Scheme for Support Vector Machines and its Application to Imbalanced Classification.** Qi Kang*, Lei Shi, MengChu Zhou, XueSong Wang, QiDi Wu, and Zhi Wei. In *IEEE Transactions on Neural Networks and Learning Systems, TNNLS 2018*. [↗](#)

Awards

- 2021 **Invited PhD lightning talk**, ACM Multimedia Asia
- 2021 **ICDM 2021 Best Student Paper Candidate**, IEEE
- 2021 **3-Minute-Thesis Final-list**, UNSW, check out the [video](#) here.
- 2021 **3-Minute-Thesis Second Prize (2 out of 7)** School of Computer Science and Engineering, UNSW.
3MT is a competition for PhDs to consolidate their ideas and crystallise research discoveries in 3 minutes.
- 2021 **Google Research India Graduate Symposium Attendee.**
- 2019 **TFS-CSC PhD scholarship.** Four-years funding with tuition fee waiver, UNSW and CSC.
- 2019 **Outstanding Master Thesis.** Tongji University award for academic excellence during the master.
- 2018 **TJ-TUM Industrial 4.0 Symposium.** Selected to present the master project in Technical University of Munich.
- 2015 **Exchange Student Scholarship.** Sponsored by China-Scholarship-Council (CSC) for exchange program in RMIT.

Teaching Assistant

Bachelor COMM1190 "Data, Insights, Decisions", Term 3 2021, UNSW.

Skills

Languages Python, Matlab, R, C++, SQL.
 Frameworks PyTorch, NumPy, Tensorflow, scikit-learn, Pandas.
 Misc. Git, LaTeX.

Other Projects

- 2020 | **Spatial-Temporal Data Mining for Smart Cities** with Dr. Lei Bai. (University of Sydney)
<https://www.researchgate.net/project/Spatial-Temporal-Data-Mining-for-Smart-Cities>
 Spatial and temporal knowledge exploitation on Public transportation systems in New South Wales.
- 2019 | **Concept Drift Detection in HSR Pantograph Systems** with Prof. Qi Kang (Tongji University)
<https://www.researchgate.net/project/Concept-Drift-Detection-2>
 Distributional drifts representation and tracing in non-stationary environments.

Languages

Mandarin (mother-tongue) · English (IELTS 7.5) · Shanghainese

Interests and Volunteering

- Term2 2020 | **Personalized English Language Enhancement PELE** · Mentor
 Together with the UNSW linguistic A. Prof. Mira Kim, enabled personalized English learning and hosted social clubs for International students to accomplish a smoother life transition in Australia.
- 2012 – | **Dialects and Psychology** · Interests
 Strong curiosity in people, been travelled and studied in many places, love "guessing" and "classifying" a person's hometown by the dialect. Interested in psychological explanation for human behaviors, recently reading *The Social Animal* by Elliot Aronson.