John Zhen Fu Pang

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Educational Qualifications:

California Institute of Technology (Caltech) Sep 2014 – Present
Ph.D in Computing & Mathematical Sciences

- Singapore National Science Scholarship (Ph.D)
- GPA: 3.9/4.0 with excellent teaching scores

Nanyang Technological University Aug 2010 – Dec 2013
Bachelor of Science (Honors) in Mathematical Sciences

- GPA: 4.75/5.00 (First Class Honors), Accelerated Bachelor's Program
- A*STAR Undergraduate Scholarship (2011 – 2013), Chairman's Honour List 2012/2013

Work Experience:

Schlumberger Technology and Innovation Center (STIC) Jun 2017 – Sep 2017
Data Science Intern, Machine Learning and High Performance Computing Group

- Utilized ML models for anomaly detection; STIC Intern Hackathon Champion

Institute of High Performance Computing (IHPC, A*STAR) Dec 2013 – Sep 2014
Research Engineer, Complex Systems Group

- Statistical analysis and GUI of Housing Demand in Singapore on Python and R
- Analysis on Car-Following Models and animation on MATLAB to display "stop-and-go" traffic

Institute for InfoComm Research (I^2R, A*STAR) May 2012 – Aug 2012
Research Assistant, Data Analytics Department

- Designed mixture of Gaussian trees model to oversample parsimoniously for imbalanced classification

Research Highlights:

Conference Publications:

1. "The Efficiency of Open Access in Platforms for Networked Cournot Markets"
   John Z. F. Pang, Hu Fu, Won Lee, Adam Wierman, IEEE Infocomm 2017, Atlanta, GA, USA
2. "Load-side Frequency Regulation with limited control coverage"
   John Z. F. Pang, Linqi Guo, Steven Low, IREP 2017, Porto, Portugal
3. "MOGT: Oversampling with a Parsimonious Mixture of Gaussian Trees Model for Imbalanced Time-Series Classification"
   John Z. F. Pang, Hong Cao, and Vincent Y. F. Tan, IEEE MLSP 2013, Southampton, UK

Journal Publications

1. "A Parsimonious Mixture of Gaussian Trees Model for Oversampling in Imbalanced and Multi-Modal Time-Series Classification"
   Hong Cao, Vincent Y. F. Tan and John Z. F. Pang, IEEE TNNLS, 2014

Please refer to Google Scholar Page for full list of publications

Skills

- Technical knowledge: Optimization & Control, Statistical Inference, Machine Learning, Algorithmic Game Theory, Networked Economics
- Programming Languages: MATLAB, C++, R, Python, Java, TeX
- Other technical experience: Amazon AWS, Google Cloud
- Languages: English, Mandarin