Xin Huang

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Education

- **Ph.D., Computer Science** Aug. 2021 – present
  - Texas State University, San Marcos, TX
- **Ph.D., Computer Engineering (GPA 4.0)** May 2018 – July 2021
  - Florida Institute of Technology, Melbourne, FL
  - Transferred to Texas State University with the advisor
- **M.S., Electrical Engineering (GPA 3.85)** May 2016 – Dec. 2017
  - Florida Institute of Technology, Melbourne, FL
- **B.E., Electronic Science and Technology** Sept. 2011 – June 2015
  - South China University of Technology, Guangzhou, China

Work Experience

- **Software Intern – NVGraph, NVIDIA Corporation** Feb. 2021 – July 2021
- **Research Assistant, Florida Institute of Technology, Melbourne, FL** Aug. 2018 – Dec. 2020
  - Using GPUs to Accelerate Graph Algorithms (e.g., PageRank and Monte Carlo Methods).
  - Deep Learning for Earthquake Detection using Low-Cost Sensors.
  - Machine/Deep Learning for HPC System Log Analysis and Freight Mode Choice Prediction.
  - Sampling and Estimation from Large Graphs.
  - Artificial Neural Networks for Boolean Satisfiability Problem and Travelling Salesman Problem.

Publications

- **An Efficient and Scalable Algorithm for Estimating Kemeny's Constant of a Markov Chain on Large Graphs**.
  - S. Li*, **X. Huang***, C.-H. Lee.
  - ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), Aug. 2021.
  - Acceptance Rate: 15%
- **Estimating Distributions of Large Graphs from Incomplete Sampled Data.**
  - S. Li, **X. Huang**, C.-H. Lee.
  - IFIP Networking Conference, June 2021.
  - Acceptance Rate: 25%

- **CrowdQuake: A Networked System of Low-Cost Sensors for Earthquake Detection via Deep Learning.**
  - **X. Huang***, J. Lee*, Y.-W. Kwon, C.-H. Lee.
  - ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), Aug. 2020.
  - Acceptance Rate: 16%

*Equal contribution

Presentations

- **An Efficient and Scalable Algorithm for Estimating Kemeny's Constant of a Markov Chain on Large Graphs** Aug. 2021
  - ACM KDD 2021, Virtual Conference
- **CrowdQuake: A Networked System of Low-Cost Sensors for Earthquake Detection via Deep Learning** Aug. 2020
  - ACM KDD 2020, Virtual Conference
- **Deep Learning for Earthquake Detection using Low-Cost MEMS Sensors** Sept. 2019
  - Kyungpook National University, Daegu, South Korea
  - 4th International Conference on Earthquake Early Warning, Seoul, South Korea

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Awards

- **ACM KDD 2020 Student Travel Award** Aug. 2020
- **Doctoral Graduate Research Assistant Tuition Scholarship** Aug. 2018 – Dec. 2020

Skills

- **Programming**
  - Python, MATLAB, R, C++, CUDA Programming, Shell
- **Data Mining & Machine Learning**
  - Feature Engineering, Supervised/Unsupervised Learning, Classification, Regression, Clustering, Anomaly Detection, Deep Learning, Interpretability, Time Series Analysis, Federated Learning
- **Network Analysis & Graph Mining**
  - Graph Properties, PageRank, Monte Carlo Methods, Graph Neural Networks
- **Software & Libraries**
  - Scikit-learn, TensorFlow, PyTorch , Numba, Microsoft Office, LaTeX, Git, Markdown
- **Operating System**
  - Windows, MacOS, Linux
- **Soft Skills**
  - Adaptability, Quick Learner, Confidence, Self-Management, Strong Work Ethic