# Xin Huang

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**GitHub:** https://github.com/xhuang2016

#### **Education**

▶ Ph.D., Computer Science

 Texas State University, San Marcos, TX

 ▶ Ph.D., Computer Engineering (GPA 4.0)

 Florida Institute of Technology, Melbourne, FL

 ▶ M.S., Electrical Engineering (GPA 3.85)

 Florida Institute of Technology, Melbourne, FL

 ▶ B.E., Electronic Science and Technology
 Sept. 2011 – June 2015

# **Work Experience**

Software Intern – NVGraph, NVIDIA Corporation

South China University of Technology, Guangzhou, China

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

**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