# Yitao LI

## Areas of Interest

- O Data Science on complex networks, large scale graph analysis
- Topological data analysis, applications to networks
- Nonparametric statistical methods, functional data analysis
- Machine Learning and Graph Mining on Bitcoin and Ethereum Blockchains

### Education

2017-Present University of Texas at Dallas - Master of Science in Statistics,

Advisor: Yulia R. Gel; Current GPA 4.0/4.0.

2012–2014 University of Florida - Master of Science in Mechanical Engineering,

Achievement Award Scholarships; GPA 3.6/4.0.

2008–2012 Central South University - Bachelor of Science in Mechanical Engineering,

Changsha, China, GPA 89/100, Rank top 10%.

# Experience

Jan. 2018 - Research Assistant in Statistics and Computer Science, University of Texas at Dallas.

Present Team with UTD Data Security and Privacy Lab

- Explore topological data analysis method on large scale networks: cryptocurrency market
- Compute topological features on graphical models from over 1 million transaction records
- Predict Ethereum token price return with functional data analyzed data shape variables
- Detect anomalous transaction address in Bitcoin blockchain

Topics: Topological Data Analysis/Blockchain/Functional Data Analysis/Graphical Model

Aug. 2014 - Mechanical Engineer, Aker Solutions Inc., Houston, TX.

Dec. 2016 • Simulated and verified the design of offshore oil and gas production equipment

o Developed employee and project database to facilitate management and tender teams

Jan. - May Mechanical Engineer Intern, SpinCore Technologies, Inc., Gainesville, FL.

2014 Improved enclosure design and performed product machining & assembly

## **Publications**

Submitted Ethereum Token Price Anomaly Prediction with Topological Depth Curves.

Y. Li, U. D. Islambekov, C. G. Akcora, E. Smirnova, Y. R. Gel, M. Kantarcioglu

## Computer Skills

Coding R, C++, Java, Python, Matlab, Excel-VBA, SAS, LATEX

Libraries Igraph, Tidyverse (ggplot), Plotly ,GUDHI, javaPlex, scikit-learn

### Others

Certificate CFA Level III candidate

Membership American Statistical Association – Statistical Learning and Data Science

Talks University of Texas at Dallas, Statistics, Dallas, Texas. Oct 2018.