

## EDUCATION

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- Texas A&M University - College of Science** **College Station, Texas**  
*Doctor of Philosophy in Statistics, Master of Science in Mathematics*, May, 2019 May, 2024
- Graduate Teaching Assistant in Statistical Computations, Machine Learning
  - Walter E. Koss Endowed Fellowship (\$8628 and in-state tuition) Aug. 2018
  - **Courses:** Advanced Statistical Computation, Theory of Linear Models, Probability for Statistics, Applied Bayesian Methods, Mathematical Modeling, Optimization, Numerical Analysis, Numerical Partial Differential Equations
- Georgia Institute of Technology - College of Computing** **Atlanta, Georgia**  
*Master of Science in Computer Science* Aug. 2020
- Graduate Teaching Assistant in Machine Learning
  - Graduate Assistant of Mining Association Faculty Endowment
  - **Courses:** Machine Learning, Deep Learning, Machine Learning for Trading, Big Data Health, Data & Visual Analytics, Game AI, Algorithms, Software Development Process, Database System Concepts & Design, Computer Networks
- Beihang University - School of Mathematics and System Science** **Beijing**  
*Bachelor of Science: Hua Loo-Keng Mathematics Class (Honored Program of Mathematics)* July, 2018
- Mathematical Contest in Modeling (Honorable Mention, Top 19% Worldwide) Apr. 2017

## PROJECTS

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- Neural Networks in prediction of porosity and throat size in randomly packed bed structure** Apr. 2020  
*Master's project* *Nimisha Roy, Dr. Mahdi Roozbahani*
- Generating mono sized and Gaussian distributed particles to simulate the bed structure
  - Developing a Deep Neural Network structure to predict the porosity and throat size distribution
- Temporal and Static Tensor Factorization for Phenotyping Electronic Health Records** Apr. 2020  
*Course project of Big Data Health at GaTech* *github.com/nxli/TASTE*
- Combine the PARAFAC2 model with non-negative matrix factorization to model a temporal and a static tensor for computational phenotyping and Predictive modeling by analyzing electronic health records
  - Translated MATLAB code of TASTE and Nonnegative matrix factorization (NMF) algorithms based on alternating non-negativity constrained least squares to Python then did compatibility modification
- Trading Agent Using Numerical Indicators** Nov. 2019  
*Course project of Machine Learning in Trading at GaTech*
- Designed a learning trading agent using Random Forest, Q-learning and optimization, which is able to learn a strategy when provided a stock symbol and a time period and make predictions about future price changes.
  - Devised numerical/technical indicators to evaluate the state of a stock on each day including MACD, SMA, EMA, Bollinger Bands and CCI.
  - The agent beat manual strategy by 60% from 2008-01 to 2010-01 with commission 9.95 and impact 0.005 on symbol JPM.
- PTE: Predictive text embedding through large-scale heterogeneous text networks** Nov. 2019  
*Course project of Machine Learning at GaTech* *www.xingchi.li/PTEexperiments*
- Using Linear Regression, CNN and Support vector Machine to predict in NLP and compare the results using F1-MACRO and F1-MICRO score
  - Visualization of text embedding and interactive plotting based on input using D3
- Database System for Vehicle Reselling Business** Jul. 2019  
*Course project of DB Sys. Concepts & Design at GaTech* *Saozhong Han, Yu Zhang*
- Using PHP to develop a web database application for supermarket chain where where vehicles information, transactions and users are stored.
  - Design and optimize relational database EER schema for transaction details.

## PUBLICATION

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Please refer to <https://xingchi.li>

## TECHNICAL SKILLS

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Python, R, C, Java, SQL, JavaScript-D3, UML, HTML, CSS, MATLAB, git, bash,  $\LaTeX$   
Hadoop, Spark, Pig, Agile software development process, test driven development