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| **Tianjian Guo****Education****Ph.D. in Management Science, Information System,** Department of Information, Risk, and Operations Management.McCombs School of Business, University of Texas, Austin (expected 2024)Research Interests: * Applications of Machine learning, Deep Learning, and Explainable AI in healthcare
* Economic and policy effects of digital transformations, such as Health Information Exchange, in healthcare
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| **Bachelor of Science, Computer Science**, Department of Computer Science**;**  **second major: Mathematical Decision Science,** Department of Statistics and  Operation Research University of North Carolina at Chapel Hill**GPA: 3.75/Major GPA: 3.89/3.73**Relevant courses: Stochastic Modeling, Data Structures, Computer Organization, Algorithm, Internet Services & Protocols, Statistical Methods, Database, Machine Learning, Distributed System, Optimization, Bio-algorithms, Operation System |
| **Research & Work Experience** |
| Honor thesis in Mathematical Decision Science, Department of Statistics and Operational Research, UNC-CH | August 2018 – May 2019 |
| * Exploring various methods to estimate characteristics of graphs, such as triangle counts, when the input is a stream of edges.

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| Collaborator for Large Course Redesign, Department of Statistics and Operational Research, UNC-CH | May 2018 – August 2018 |
| * A 200-hour project to revamp and upgrade MAXIM, the accompanying software for the textbook *Introduction to Modeling and Analysis of Stochastic Systems* into a package for the programming language R.
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| Mentored Research, Department of Statistics and Operational Research, UNC-CH | January 2017 – August 2018 |
| * Estimating degree distribution of large-scale graphs by performing random edge sampling/random node sampling and fitting the samples through various statistical estimation approaches.
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| Research Assistant, Department of Computer Science and Technology, Tsinghua University | June 2016 – August 2016May 2017 – August 2017May 2018 – August 2018 |
| * Contributed to building a framework for Breadth-first search that utilizes both the CPU and the GPU utilizing both OpenMP and CUDA.
* Assisted finalizing a conference paper about optimizing Breadth-first search on supercomputers
* Modified and documented an application that runs MPI programs on Hadoop YARN clusters through the usage of MPICH’s hydra process manager.
* Created a modified version of the graph-embedding algorithm, structure2vec, that lets machine-learning methods, such as support vector machines, to process large scale graphs as if the nodes are vectors.
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| **Leadership Positions** |
| Director, HackNC organizing committee | February 2016 – February 2018 |
| * Organizing an annual hackthon that historically had 600 to 800 people attending.
* Responsible for logistics of the event, managing the supplies, volunteers, contractors, food vendors that made the event possible.
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| Director, UNC ESport club | May 2016 – May 2018 |
| * Officer of the largest special interest club on campus.
* Experience with organizing large events, such as Gamefest, a biannual event, with more than 200 attendance on average, for people around the Triangle area to get together and share their love of video games
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| **Relevant Skills** |
| Java, JavaScript, C#, C/C++, SQL, Python, R, Matlab, Stata, SAS |
| Deep learning frameworks: Tensorflow, PyTorch, Caffe/Caffe2, CUDA/CUDNN |
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