

YU YANG

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EDUCATION

University of Minnesota, Twin Cities

Ph.D. student in Statistics

GPA: 3.978/4

August 2018 - May 2023 (Expected)

Minneapolis, MN

Shanghai University of Finance and Economics

Bachelor of Science in Statistics

GPA: 3.89/4

September 2014 - June 2018

Shanghai, China

EXPERIENCE

Seagate Technology

Research Assistant (Advisor: Prof. Xiaotong Shen; Mentor: Sthitie Bom)

09/2019–Present

Minneapolis, MN

- Explored large-scale and multi-sourced datasets and proposed systematic preprocessing pipelines
- Constructed predictive models for defected wafer products
- Proposed causal structure learning methods to unveil the causal relations among abnormal events in manufacturing assembly lines
- Proposed evaluation methods to examine the quality of the learned network without ground truth

PROJECTS

Causal Discovery for Mixed Data with Temporal and Group Constraints 01/2021–04/2021

- Proposed three causal discovery methods for high-dimensional mixed data with special constraints
- Performed experiments on the simulated data to examine the performance of the three methods

Retro-BiDAF: A Retrospective Reader Over BiDAF

10/2020–12/2020

- Proposed a novel model for the SQuAD 2.0 Challenge
- Examined the idea of retrospective reading in the non-PCE scenario

Kaggle: Lyft Motion Prediction for Autonomous Vehicles

09/2020–11/2020

Team Members: Xuesong Hou, Chunlin Li, Yu Yang

- Explored the large-scale video data and visualized the paths of vehicles
- Built an ensemble model to predict the motion of self-driving vehicles
- Ranked top 6%

Wells Fargo Campus Analytics Challenge 2020

07/2020–08/2020

Team Members: Xuesong Hou, Chunlin Li, Yu Yang

- Analyzed multiple models to identify proper encoding schemes
- Proposed a novel method called Sparse Grouping Pursuit which efficiently reduced feature dimension
- Won the Grand Prize of the year

R Package: ImbCalib – Probability Calibration for Imbalanced Data

04/2020–05/2020

- Wrote an R package to calibrate probabilities for imbalanced data
- Compared probability calibrations visually and quantitatively

MinneMUDAC 2019 Student Data Science Challenge

09/2019–11/2019

Team: Women in Math and Stats (Advisor: Prof. Gilad Lerman)

- Collected data from a wide range of sources and applied creative feature engineering
- Proposed insightful modeling strategies to predict the soybean futures closing prices
- Delivered talks in competition, to companies, seminars, and Meetup groups

- Won the Analytical Acumen Award

Learning Rate Decaying Scheme Investigation

11/2019–12/2019

Team Members: Liwei Huang, Yu Yang

- Proposed several learning rate decaying schemes and applied them to MNIST and CIFAR-10
- Analyzed the decaying schemes in terms of convergence time and model performances

Kaggle: Travelers Claim Fraud Detection

11/2018–12/2018

Team Members: Somyi Baek, Sam Piehl, King Yiu Suen, Xun Xian, Yu Yang

- Proposed a new feature which greatly improved the predictive capability
- Constructed an ensemble model for prediction and applied LIME for interpretation
- Won the 2nd place

TECHNICAL STRENGTHS

Languages	Python, R, Shell Scripting, C/C++, Matlab, HTML, CSS, SQL
Tools	Git, VS Code, Google Cloud, AWS, L ^A T _E X