# Zixuan Yuan

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**OBJECTIVE** 

Ph.D. Candidate with strong data mining skills seeking a data science researcher position.

#### **EDUCATION**

Doctor of Philosophy Rutgers Business School, Rutgers University

GPA:3.833/4.0 September 2018 - Present

Master of Science Rutgers Business School, Rutgers University

GPA:3.833/4.0 Graduation: January 2017

Bachelor of Science Department of Economics, Tongji University, China

GPA:3.3/4.0 Graduation: June 2015

### RESEARCH EXPERIENCE

# IBM Watson Research, NY, US

June 2020 - August 2020

Data Science Researcher (Internship)

1) Developed an efficient and high-performance language model to exploit valuable information from quarterly earning calls for stock market volatility forecasting.

## **Event-based Corporate Profiling**

February 2020 – May 2020

- 1) Assessed the evolving operational status of corporates from its event sequence.
- 2) Constructed event-based corporate profile via self-supervised prototype learning paradigm.
- 3) Improved the prediction accuracy of daily stock price spikes and corporate credit default events up to 75%, 80%, respectively.

# Baidu Research, Beijing, China

May 2019 - August 2019

Data Science Researcher (Internship)

2) Incorporated the incremental learning paradigm to study the evolving trip preference of Baidu Maps' users.

## Baidu Research, Beijing, China

May 2018 - August 2018

Data Science Researcher (Internship)

1) Implemented the spatiotemporal graph learning methods to provide dynamic and personalized query-POI matching criterions for Baidu Maps' users.

### SELECTED PUBLICATIONS

- 1. **Zixuan Yuan\***, Hao Liu\*, Yanchi Liu, Denghui Zhang, Fei Yi, Nengjun Zhu, and Hui Xiong. *Spatio-Temporal Dual Graph Attention Network for Query-POI Matching*. SIGIR 2020.
- 2. **Zixuan Yuan**, Hao Liu, Renjun Hu, Denghui Zhang, and Hui Xiong. *Self-Supervised Prototype Representation Learning for Event-Based Corporate Profiling*. AAAI 2021.
- 3. **Zixuan Yuan**, Hao Liu, Junming Liu, Yanchi Liu, Yang Yang, Renjun Hu, and Hui Xiong. *Incremental Spatio-Temporal Graph Learning for Online Query-POI Matching*. WWW 2021.
- 4. Denghui Zhang\*, **Zixuan Yuan**\*, Hao Liu, Xiaodong Lin, and Hui Xiong. *Learning to Walk with Dual Agents for Knowledge Graph Reasoning*. AAAI 2022.
- 5. Denghui Zhang, **Zixuan Yuan**, Yanchi Liu, Hao Liu, Fuzhen Zhuang, Hui Xiong, and Haifeng Chen. *Domain-oriented Language Modeling with Adaptive Hybrid Masking and Optimal Transport Alignment*. KDD 2021.
- 6. **Zixuan Yuan**, Junming Liu, Haoyi Zhou, Hao Liu, and Hui Xiong. *An Online Adaptive Sequence Learning Framework for High-Frequency Trading*. TKDE (under review).

#### WORK EXPERIENCE

# GMAX Asset Co. Ltd., Shenzhen, China

Data Analyst Intern

May 2016 - August 2016

- 1) ETL large-scale daily stock market data using Python/R.
- 2) Performed extensive data analysis on stock market data to validate the trading strategies.
- 3) Wrote reports about the impact of fiscal policies on the finance industry.

#### TECHNICAL SKILLS

Python, PyTorch, TensorFlow, R, SQL, Java, C#, SPSS, EXCEL, EVIEWS, SAS, Tableau

General: Data Mining, Natural Language Processing, Graph Representation Learning, Spatiotemporal Analysis; Applications: Event-driven Investing, Language Modeling, Quantitative Trading, POI Recommendation