Yangqin Yan UMSI

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EDUCATION

University of Michigan School of Information (UMSI), Ann Arbor

M.S., Master Science of Information

June, 2023 (Expected)

Cumulative GPA: 3.94/4.00

University of Michigan - Shanghai Jiao Tong University Joint Institute (UMJI), Shanghai

B.S., Electrical and Computer Engineering

June, 2022 (Expected)

Minor in Computer Science

RESEARCH EXPERIENCE

Autonomous Positioning System for Indoor Pedestrians

Researcher, March, 2020 - October, 2020

School of Electronic Information and Electrical Engineering, Shanghai Jiao Tong University

- Finished the app development that can acquire data in the sensors of smart phones.
- Built a cloud server with SQL Database.
- Connected the positioning algorithm with SQL Database for data communication.

Time Series based Smartphone Waking Prediction

Research Assistant, October, 2020 – present

Wireless Networking and Artificial Intelligence Lab, UMJI, Shanghai Jiao Tong Univeristy

- Preprocessed power consumption data of mobile phones and labeled them as training data.
- Improved accuracy of learning model using input normalization.

SELECTED PROJECTS

Analysis of Students Admitted by Top Universities

SI618 Data Manipulation and Analysis

UMSI, University of Michigan

October, 2021 – November, 2021

- Joined the datasets of students' information and top universities rankings using SQL.
- Preprocessed and cleaned the data for analysis using pyspark.
- Found the relationship between students' average TOEFL scores and universities' ranks.

Search Engine for Food with Query Expansion

SI650 Information Retrieval

UMSI, University of Michigan

October, 2021 - December, 2021

- Built an Information Retrieval(IR) system with the function to search food recipes.
- Applied learning to rank machine learning model to improve the performance of the IR system.
- Added functions like ingredients filtering using tokenization to refine the search results.

Word2Vec for Wikipedia

SI630 NLP, Algorithms and People

UMSI, University of Michigan

January, 2022 – Now

- Used subsampling and negative sampling to generate training data for neural networks.
- Implemented Word2Vec model and accelerated the computation speed.
- Built training pipeline and evaluated the model.

Robotgame Visualization

SI649 Information Visualization

UMSI, University of Michigan

November, 2021 – December, 2021

- Built interactive tree graph using python to show relationship between different robots.
- Built interactive line chart and did regression using Altair to predict robot information.
- Designed User Interface to help user read and explore visualizations.

SKILLS

- Programming Language: Matlab, C/C++, Java, R, Python, SQL, Spark, Hadoop, MapReduce
- Professional Software: Vivado, Multism, Origin, SQLServer, Tableau