Shiyuan Zhang

Education

University of Illinois at Urbana-Champaign

Master of Computer Science

Dean's List

Sep. 2023 – Dec. 2024 Champaign, IL GPA: 4.00/4.00

Sep. 2019 - May 2023

University of Illinois at Urbana-Champaign

Bachelor of Science in Statistics, Minor in Computer Science Dean's List in all semesters, Graduated in Highest Distinction Champaign, IL

GPA: 3.96/4.00

Relevant Coursework

• Data Structures • Computer Vision • Software Engineering

• Database Management

• Computer Networks

• Algorithms Analysis

• Artificial Intelligence

• Statistical Modeling

Technical Skills

Code and Frameworks: Python, C/C++, R (dplyr, ggplot2, tidyverse), Java, SQL, MongoDB, Neo4j, HTML, CSS Python Libraries: PyTorch, NumPy, SciPy, Pandas, Scikit-learn, NLTK, OpenCV, PySpark, Flask, Matplotlib, Seaborn Analysis and Other Tools: Linux, GitHub, MATLAB, Docker, Jupyter Notebook, Tableau, Slurm

Academic Experiences

University of Illinois Urbana-Champaign, SIIP program

December 2023 - Now

Teaching Assistant

Champaign, IL

- Mentor: Prof. Sotiria Koloutsou-Vakakis.
- Focus: Responsible for assisting in the design and implementation of programming assignments in Python and R, and holding office hour.

University of Illinois Urbana-Champaign, TRAIS lab

October 2023 - Now

Research Assistant

Champaign, IL

- Mentor: Prof. Jiaqi Ma, Junwei Deng.
- Focus: Analyzing the influence of individual data points on the output of Music Transformer models by using TRAK and TracIn frames.

University of Illinois Urbana-Champaign, CS 411

May 2022 - August 2022

Course Assistant

Champaign, IL

- Verified the logic of SQL queries, database creation, and storage questions.
- Completed the course questions answering, assignment grading, and exam supervision for more than 150 students.

Working Experiences

CCB Fintech

May 2023 – August 2023

Data Analyst Intern

Shanghai, China

- Conducted A/B testing on multiple controlled variable samples using R to assess the significant impact of various customer service strategies on advertiser satisfactory, resulting in a 12% higher retention rate.
- Built a robust customer credit control and risk management evaluation model using the Logistic Regressionand Decision Tree model in Python. Enhancing the efficiency of the credit granting procedure from 2 hours per customer to 10 mins.

Projects

Pneumonia Detection on Chest X-Rays With Deep Learning Model | VGG-16/19, ResNet-50

October 2023

- Handled the integration and cleansing of data from multiple public datasets, performed image enhancement, and normalization using OpenCV to improve model generalizability.
- Constructed the CNN using Pytorch, with an emphasis on transfer learning, adapting pre-trained network structures to fit the pneumonia detection task.

Database System based on GCP for Champaign Pet Store | SQL, Python, Django, GCP

February 2022

- Built a MySQL database of local pet store selling information based on GCP which realized the addition, deletion, modification, query of pet information, and feature filtering search.
- Used the Django framework of Python to build the corresponding web front end.