

Bill Li

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EDUCATION

Carnegie Mellon University, Heinz College

Master of Information Systems Management - Business Intelligence and Data Analytics (MISM-BIDA)

Pittsburgh, PA

Expected December 2024

- Cumulative GPA: 3.93/4.00

University of Rochester

Bachelor of Engineering (B.E.) in Computer Science & Bachelor of Art (B.A.) in Economics

Rochester, NY

August 2019 – May 2023

- Cumulative GPA: 3.83/4.00 (Degree Honor: Cum Laude Highest Distinction)

SKILLS

- **Programming Languages:** Java, SQL, Python (NumPy, Scikit-Learn, Pandas, Seaborn, PyTorch, PySpark, TensorFlow), R, Kotlin, C, LaTeX
- **Analytical Techniques:** Support Vector Machines, Decision Trees, Random Forests, K-means Clustering, XGBoost, Hypothesis Testing (p-value, false discovery rates, t-statistics), Principal Component Analysis, Outliers Analysis, Regression Analysis, Time Series Analysis
- **Software:** Excel (VBA, vlookup/xlookup, PivotTable), RStudio, Jupyter Notebooks, Visual Studio Code, Android Studio, Stata, Oracle Cloud
- **Databases:** Oracle SQL, MySQL, Microsoft SQL Server, PostgreSQL, MongoDB
- **Visualization:** Microsoft Power BI, Tableau, D3.js, ggplot2, Matplotlib

WORK EXPERIENCE

AsiaInfo Technologies

Data Analytics Internship

Nanjing, China

May 2023 – July 2023

- Built Machine Learning models in Python to forecast demands for elderly-care beds in medical institutions of Shanghai for fiscal year 2025
- Conducted ETL processes in Python, extracted and preprocessed data from government websites by implementing web crawlers and APIs
- Utilized ARIMA, Logistic Growth, Holt's Linear Trend and GM (1,1) models to enhance decision-making for marketing initiatives
- Developed interactive dashboards in Power BI and Excel VBA to visualize key metrics, including income, through demographic heatmaps
- Optimized user experience by recommending engineer teams based on selection of multiple predictive models to forecast rates of complaints

University of Rochester

Teaching Assistant of Database System Management Course

Rochester, NY

August 2022 – May 2023

- Mentored over 100 students by conducting weekly office hour sessions, reviewing crucial materials of lectures, and addressing inquiries
- Presented detailed explanations to help students better understand course materials and prepare for assignments and exams
- Initiated and regularly updated a mind map project to help students better visualize correlative database concepts
- Graded assignments and exams promptly to compile common mistakes, channeled communication between students and the professor

Jiangsu Ya'ao Technology Co., LTD (NEEQ: 430500)

Mobile Application Development Internship (Android)

Nanjing, China

May 2022 – July 2022

- Developed App in Android Studio using MVVM framework in Java, following Agile methodologies and implementing provided prototypes
- Implemented front-end functionalities including login, port configuration, and visualization interfaces, to achieve an intuitive user interface
- Visualized sensor statistics from over 10 base stations, each with 100+ data entries, using recycler views and animated pie charts
- Contributed to API service using Spring framework in Java and collaborated with backend engineers to conduct back-testing for API reliability

PROJECT EXPERIENCE

“[CityPulse](#)” Relocation Recommendation Application

Project Lead – Data Focused Python

Pittsburgh, PA

October 2023 – December 2023

- Developed relocation recommendation application in Python, aggregating data from reputable platforms using web crawlers and APIs
- Extracted, sanitized, and preprocessed diverse data sources to offer users personalized city recommendation based on seven key metrics
- Led a team of five through Agile project phases, delegated tasks based on strengths, and utilized Kanban board for efficient progress tracking
- Presented in non-technical settings, emphasized unique value proposition, and showcased sample outputs to secure potential financial support

“Order Management Portal” Database Implementation

Project Lead – Database System Management

Rochester, NY

January 2022 – May 2022

- Designed and implemented a relational database system in MySQL to facilitate management of daily orders for online retail stores
- Led a team of three in developing an ER Diagram, converting it into relations, and performing First, Second, Third, and BCNF normalization
- Executed comprehensive MySQL database project in PHP, designed personalized web interfaces with HTML and CSS, and facilitated user and administrator interactions with the database under distinct logics through secure login functionalities

Exploratory Data Analytics (EDA) on COVID-19 Vaccine Adverse Reactions

Project Member - Mathematical Statistics

Rochester, NY

February 2021 – May 2021

- Investigated potential impact of factors, including patient age and vaccine manufacturer, on vaccine adverse reactions
- Developed regression models to estimate length of hospitalization and likelihood of mortality based on distinct age groups
- Conducted data visualization using histograms and bar charts, revealing proportional relationship between length of hospital stay and age
- Inferred from analysis that Pfizer/BioNTech vaccines may result in a lower likelihood of death compared to Moderna vaccines