4504 Stearns Hill Road

Waltham, MA 02451

United States

Andy (Xiangyu) Cui

[GitHub](#) | [LinkedIn](#) | [Portfolio](#)

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5 Years project manager

2 years software engineer

2 years User Experience Researcher

EDUCATION	Relevant Coursework	Location & Date
Northeastern University		Boston, MA, USA
M.S. in Artificial Intelligence of Khoury College		Sept. 2021-Dec.2023
University of Nebraska-Lincoln		Lincoln, NE, USA
B.S. in Computer Science of Arts Science College		Sept. 2016-May. 2020
Dalian Neusoft University of Information		Dalian, LN, CHN
B.S. in Electronic Information Engineering		Sept. 2013-Sept. 2015

SKILLS

- Programing languages: Java, Python, JavaScript, HTML, CSS, C/C++, Assembly, VB
- Database: MySQL, PostgreSQL, MongoDB, Redis, SQLite, Hive
- Machine Learning: TF-IDF, Naïve Bayes, GPT-2, Bert, CNN, Transformer
- Framework/Libraries: Spring Boot, React.js, Node.js, jQuery, Django
- Version Control & CI/CD: GitHub, TFS, Azure DevOps, Jenkins, Jira
- Others: AWS, Docker, Maven, Tomcat, Axure RP, Servlet, Junit, Nginx, LaTeX, CAD design, Tableau

WORK EXPERENCE

CAC Auto Group Inc | Full-Time   Southborough, MA, USA

Data Analyst & Full Stack Engineer   Feb. 2024-Present

- Utilized advanced SQL queries to retrieve vehicle sales data from 5 different sub-store locations, creating a structured database for comparative analysis. Employed data visualization techniques to analyze trends and performances across stores.
- Developed backend systems for the official website using Python, integrating real-time sales data tracking. Additionally, implemented web scraping tools to gather current market data on car sales from Cars and CarMax, focusing on best-selling models. Analyzed over 500,000 local vehicle data entries daily, applying regression analysis to determine optimal vehicle pricing. Achieved a daily price match with market rates, which contributed to a 70% increase in store revenue.
- Constructed reports in Tableau to present to management, providing insights on pricing trends and sales volume, accompanied by data-driven recommendations for strategic decision-making.
- Rebuild the company's business management system based on daily operational logic and business processes using Node.js, Express, and MongoDB.

AlpaLifeBio Inc | Internship   Woburn, MA, USA

Software Engineer & Data Analyst | Analysis of Potential Consumer Demand   Dec. 2022-June. 2023

- Executed data collection from biomedical public databases using Python and graphical web scraping tools, enhancing the dataset for advanced analysis. Additionally, processed and analyzed over 500,000 data entries daily, utilizing graphical data representations to streamline reporting and significantly boost workflow efficiency.
- Applied TF-IDF techniques for data comparison and matching, effectively identifying potential clients with a match rate of up to 95%, significantly contributing to targeted marketing strategies.
- Consolidated existing datasets for integrated analysis and established a structured SQL database, implementing tag processing for improved search and retrieval operations. This approach has saved 80% of the time for future data searches and significantly enhanced work efficiency, thereby saving costs for the company.

Dutchgo LLC | Self-employed & Co-founder   Omaha, NE, USA

Project Analyst & Project Manager | Analysis and Strategy Optimization   Oct. 2020-Apr. 2022

- Analyzed customer demand for streaming media during the Covid-19 pandemic using advanced **SQL** queries and **Python**, then trained and tested a **Random Forest** model with **Python** to identify potential user profiles for conversion, achieving an accuracy of 98%.
- Determined customer markets and consumption levels based on selected categories, extracted and preprocessed monthly market data of customers using **SQL** and **Python**, and predicted revenue trends using a multiple regression model with an accuracy of 85%, providing recommendations for strategic business decisions.
- Analyzed User Behaviors: Studied user behavior patterns and designed user-friendly interactions based on **Human-Computer Interaction (HCI)** principles. Used **Axure RP** to create software interaction models that align with user behavior.
- Created interactive dashboards with **Tableau** to monitor key investment metrics for stakeholders, including **ROI (Return on Investment)**, growth rate, and portfolio balance, and conducted comprehensive root cause analysis of any abnormal trends.