Jonathan Hu

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EDUCATION

University of Colorado Boulder — Boulder, CO
Bachelor of Science in Applied Computer Science — December 2024
Relevant Coursework: Datamining, Data Structures, Computer Systems, Data Science Algorithms, Database Design, Discrete Structures, Algorithms, Information Visualization, Software Development, Principles of Programming

New York University — New York, NY
Bachelor of Applied Psychology — May 2022
Minor in Computer Science
Relevant Coursework: Operating Systems, Computer Systems Orgs, Data Structures, Algorithms

EXPERIENCE

Advocacy and Community-Based Trauma Studies (ACTS) Lab — New York, NY
Data Analyst — September 2021 – February 2023

- Developed and implemented Python scripts for advanced data preprocessing and apply statistical and machine learning techniques for comprehensive data analysis.
- Collaborated with cross-functional teams to code and analyze interview transcripts, employing qualitative data analysis to uncover key themes for enhancing trauma patient treatment strategies.
- Designed Python-based applications to automate and optimize data recording and spreadsheet management processes, significantly boosting efficiency and accuracy.

Lilo — New York, NY
Data Analyst Intern — September 2021 – May 2022

- Spearheaded the design and development of innovative programs for comprehensive analysis of the application's user base, enhancing strategic insights and operational efficiency.
- Created dynamic data visualizations through Python and Tableau, translating complex datasets into clear, actionable insights to guide executive decision-making and drive application improvements.
- Conducted in-depth data analysis to identify trends, behaviors, and user engagement metrics, resulting in targeted strategies that significantly improved user experience and satisfaction.

PNDA LahiArts — Sacramento, CA
Graphic Designer and Social Media Manager — June 2020 – January 2021

- Responsible for the design and development of engaging graphics for social media campaigns, promoting company-sponsored events and enhancing awareness of Asian Arts.
- Established and maintained an efficient communication system for coordinating event planning and graphic design requirements with team members, ensuring seamless execution and alignment with company objectives.

SKILLS

Python, SQL, PostgreSQL, NoSql, C++, C, Java, Git, MongoDB, Flask, HTML, Tableau, PowerBi, Excel, R, Stata, Matplotlib, Pandas, Scikit-learn, TensorFlow, Microsoft Office Applications, Adobe Photoshop

PROJECTS

Court Finder: Basketball Court Review Website — December 2024

- Designed and implemented a SQL database to store and manage all entities within the website, enabling efficient data retrieval for court reviews, user information, and court features.
- Structured the database to support key website functionalities, such as user-generated content, rating systems, and court details, enhancing the user experience with quick access to relevant court information.
- Worked closely with a cross-functional team using the MERN stack, contributing to database integration with the backend and frontend to ensure seamless connectivity for a fully responsive user experience.

Customer Insights with KMeans Clustering and Machine Learning — November 2024

- Developed a comprehensive customer segmentation model using KMeans clustering and Random Forest analysis to predict purchase likelihood based on age, gender, item category, and purchasing behavior.
- Engineered advanced features, including Customer Lifetime Value and seasonality scores, to enhance predictive accuracy and provide actionable insights into customer buying patterns.

Maze Solver in C++ — April 2024

- Developed an advanced maze-solving application that analyzes and processes maze images, implementing Dijkstra's Algorithm and other sophisticated algorithms to efficiently find optimal solutions.
- Enhanced the system's capability by incorporating image recognition techniques for maze analysis and leveraging data structures to optimize pathfinding.