ROBERT CONNER

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SUMMARY

MS in Data Science with experience in data mining, data analysis, and data visualization. Skilled in statistical analysis, machine learning, stakeholder management, and project coordination. Proven leadership as an Army platoon sergeant, demonstrating exceptional organizational and team management abilities. Problem solver knowledgeable about AWS Cloud, Python, Tableau, and Power BI. Seeking a data analyst role to automate workflows and support continuous process improvements at an enterprise dedicated to using data-driven insights to drive progress.

EDUCATION

Middle Tennessee State University Murfreesboro, TN
Master of Science in Data Science **GPA: 3.77**   **May 2024**
Bachelor of Science in Plant and Soil Science **GPA: 3.45**   **Dec 2021**

TECHNICAL SKILLS

Programming: Python, R, SQL, MySQL, VBA (Excel Macros), HTML, CSS
Cloud & Data Visualization: Jupyter Notebook, Tableau, Power BI, PyCharm, Google Cloud (GCP)/AWS/Azure

EXPERIENCE

3Z Brands, New York City, NY (REMOTE)   **Apr 2024 – Jul 2024**
Data Scientist Intern
- Led the development of a predictive models at 3Z Brands for 5 separate brands, utilizing the stacking of Prophet and XGBoost models to forecast counterfactuals for promotion effectiveness and analyze the impact of promotional strategies, achieving a 93% accuracy in variance explained.
- Enhanced model accuracy by compiling internal and external data sources, adding custom sales holiday seasonality to the Prophet model, and the creation of features and interactions to directly target promotion effects.
- Delivered a comprehensive report on model methodology and insights to company leadership, which revealed that top promotions could generate an additional $100,000+ over the past year, guiding future promotional strategies across the company brands.

Middle Tennessee State University, Murfreesboro, TN   **Apr 2020 – Dec 2023**
Data Science Graduate Research Assistant
- Delivered Convolutional Neural Network (CNN) fine-tuning project presentation at ASHS conference 2023 (Orlando) to explain the application of machine learning to non-technical audience 30+ in the agricultural/ horticultural fields, which sparked a series of productive discussions on innovative ways to leverage technology for improved field outcomes
- Developed chatbot ecosystem using the OpenAI API, where LLM chatbots autonomously controlled 3 chatbots for task completion, showcasing potential for operational efficiencies and advancing frontier of automated workflow management in a research context
- Spearheaded development and optimization of the MTSU Small Farm's website and online business profile, leading to a significant boost in online customer engagement and a measurable increase in foot traffic during sales events, demonstrating the effective integration of digital marketing strategies with traditional retail operations.

US Army, USA   **Mar 2010 – Dec 2019**
Platoon Sergeant, Battle Non-Commissioned Officer of Kandahar Air Force Base, Section Chief, Enlisted Team Member
- Selected for interim role of Platoon Sergeant for Headquarters Platoon (position 2 ranks above current grade) for 1.5 years and mentored managers on leadership, decreasing conflicts and incidents with group by 80%
- Managed discipline, accountability, and professional development for 14 soldiers and trained 4 managers on enhancing productivity, efficiency, and morale, decreasing mission preparation timelines by 10-20% and improving team cohesion
- Ensured strict accountability for $4.8M+ in equipment and oversaw tactical operation command setup and operations in coordination with senior leadership, executing 2 field operations monthly within scheduled timelines
- Oversaw all aspects of training (planning/executing briefs, seminars, team-building activities) and streamlined administrative and legal processes for 8 outgoing soldiers in unit, decreasing operational processes by 33%

PROJECTS

Context-Aware GPT with PostgreSQL Backend –LLM Innovation and Deployment   **Summer 2024**
- Pioneered the integration of a custom GPT with a PostgreSQL database, enabling dynamic, context-aware AI interactions adaptable to diverse applications, from personalized customer service to intelligent workflow automation.
- Architected and deployed a PostgreSQL database using Heroku CLI, establishing a robust backend for storing and managing dynamic data accessible via a custom API.
- Developed and integrated a RESTful API to facilitate seamless communication between the GPT and the PostgreSQL database, enabling real-time CRUD operations and context adaptation.
- Implemented the GPT's ability to dynamically query the database, ensuring scalable and contextually accurate responses, which enhance long-term user interaction and overcome token limitations.
- **Tech Stack:** Python, JSON schema, PostgreSQL, Heroku (hosting and deployment), Heroku CLI, Git, Github, ChatGPT

Predictive Analytics for Competitive Gaming – Webscraping and Dashboard Development   **Spring 2022**
- Executed accurate web scraping of 37M data points from 82K+ "League of Legends: Wild Rift" matches, extracting both structured and unstructured data to form comprehensive dataset (money, items, kills, match results)
- Applied sophisticated data cleaning and feature engineering techniques to develop predictive model that identifies decisive factors influencing match outcomes, facilitating targeted player development and strategy refinement
- Leveraged the trained models and webscraping capabilities to construct interactive dashboard to offer players and content creators tool to benchmark performance against top-tier gameplay statistics.
- Implemented option dashboard for users to gather individual statistics through webscraping and provide real-time comparison, enabling players to identify and focus on gameplay aspects crucial for winning
- **Tech Stack:** Python, Jupyter Notebook, PyCharm, Beautiful Soup, Selenium, Dash by Plotly, Pandas, NumPy, Scikit-learn, Matplotlib/Seaborn

Predictive Analytics for College Enrollments – Machine Learning-Based Enrollment Forecasting   **Fall 2023**
- Engineered a predictive model utilizing Python to analyze enrollment trends across 1,534 US colleges, leveraging LASSO/Ridge Regression, Random Forest, Gradient Boosting, and Feed Forward Neural Networks
- Implemented extensive data preprocessing and feature engineering techniques, including one-hot encoding, missing data imputation, and Optuna for advanced hyperparameter optimization
- This model pinpointed university size and 'Carnegie Classification' as pivotal factors, underscoring the minimal impact of school financial aid on enrollment figures and emphasizing the importance of school geographical location
- **Tech Stack:** Python, Jupyter Notebook, Pandas, NumPy, Scikit-learn, XGBoost, Optuna

Advanced Analytics for Real Estate Pricing Analysis – Business Intelligence in Real Estate Pricing   **Fall 2023**
- Led study to integrate and evaluate Kernel Ridge Regression (KRR), Support Vector Regression (SVR), and Multi-Layer Perceptron (MLP) against traditional models, demonstrating nuanced model efficacies with MLP showing superior accuracy in complex pattern modeling, and informing best practices in dataset/model selection for real estate analytics
- Researched highlighted the transformative potential of machine learning in enhancing real estate investment strategies and market analysis, setting a new benchmark for future research and application in the sector
- **Tech Stack:** Python, Jupyter Notebook, Pandas, Scikit-learn, Optuna, NumPy, Matplotlib

AWARDS

2 MTSU Research Center Grants   **Aug 2020 – Dec 2021**
- Managed 2 grants from proposal to execution and spearheaded research initiatives focused on soil respiration and aerated sub-irrigation at MTSU Research Center, contributing valuable data to the field of agricultural science

SKILLS & INTERESTS

Certifications: Data Science Certificate – MTSU (2021)
Software: Microsoft Office 365 (Word, PowerPoint, Excel, Outlook), Adobe Photoshop, R Studio
Core Competencies: Agile Methodologies, Algorithms, Artificial Intelligence, Computer Vision, Data Analytics, Data Research, Deep Learning, Statistical Analysis, Data Frameworks, Big Data, Complex Data Sets, Data Modeling, PyTorch, Classifying Data
Interests: Hiking, Camping, Gardening, Science Fiction Reading, Parenting
Security Clearance: Expired Secret Clearance