Ty Painter

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EDUCATION

Vanderbilt University – Data Science Institute   **Nashville, TN**
Master of Science in Data Science   May 2022
- GPA: 3.89
- Extracurricular: Vanderbilt Football Student Video Coordinator, Teaching Assistant – Exploratory Data Analysis and Modeling & Machine Learning
- Relevant Coursework: Probability & Statistics, Modeling & Machine Learning, Data Management Systems, Algorithms, Big Data Scaling, Social Network Analysis, Managerial Finance, Corporate Valuation (at Owen Graduate School of Management)

Shippensburg University – John L. Grove College of Business   **Shippensburg, PA**
Bachelor of Science in Business Administration   May 2019
Major: Management Information Systems & Finance, Concentration: Personal Financial Planning
- GPA: 3.89
- Honors: *summa cum laude,* Beta Gamma Sigma member (Top 10% of Business School), Dean's List, Google Cloud Academic All-District Baseball Team
- Extracurricular: NCAA Division II Baseball Team, Campus Food Committee member
- Relevant Coursework: Applied Project Management, Applied Calculus, Business Systems Analysis & Design, Database Applications, Applied Company & Security Analysis, Investments

SKILLS

Relevant Skills: Data Analysis, Database Management, Data Visualization, Machine Learning (supervised, unsupervised)
Related Platforms: GitHub, Power BI, Python, R, SQL/MySQL, Tableau, Unix/Linux

EXPERIENCE

LKQ Corporation (provider of alternative and specialty automotive replacement parts)   **Antioch, TN**
IT Development Intern – IT End User Services   July 2021 – Present
- Reduced IT quarterly reporting effort by ~200% by streamlining data sources to Power BI through Python scripts.
- Customized and transformed weekly ServiceNow reports into finalized data files.
- Established a file structure to automate loading previous year data files into Python to produce 40-50 summary visualizations.
- Connected Python Scripts to Power BI to generate ad-hoc visualization dashboards for IT departmental quarterly reporting.

Vanderbilt Data Science Institute   **Nashville, TN**
Data Science Research Assistant – NFL Financial Literacy Project   November 2020 – February 2021
- Performed data cleaning processes in Python JupyterLab on public, web-scraped NFL player contract data.
- Transformed JSON files into data frames to improve efficiency of financial calculations and roster probabilities.
- Utilized the nbdev package to create tests and establish a repeatable documentation system for future statistical modeling.

Ntelicor (provider contractor of data solutions designed to optimize the business of healthcare)   **Camp Hill, PA**
Business Analyst – Medicare Part B   July 2019 – August 2020
- Maintained and enhanced the Medicare Part B claims processing system.
- Conducted research and analysis on 3-5 customer and user change requests concurrently during each quarterly release.
- Described concise functional business requirements to meet customer needs for each change request.
- Completed documentation changes on 30-80-page documents that described new system operations.
- Designed and executed 20-200 case test plans to ensure accurate system processing.
- Resolved any possible defects or problems associated with implementation.

PROJECTS

Deriving Alpha from News – Data Science Capstone Semester Project   **Spring 2022**
- Gathered and filtered news sources from the GDELT Event Database accumulating over a terabyte of data.
- Web scraped news articles using the URLs from the GDELT data and generated daily sentiment scores using an NLP API.
- Used sentiment scores to predict daily alpha in comparison to sector benchmark returns.

MLB Pitch Prediction – Case Studies in Data Science Final Project   **Fall 2021**
- Merged Kaggle pitch data from 2015-2018 and calculated pitcher and batter tendencies based on game situations.
- Developed a predictive model to predict pitch type considering game scenarios and batter vs. pitcher matchups.
- Transferred the model into an interactive Streamlit dashboard to allow users to customized player and situational inputs.

Customer Segmentation – Data Science in Teams Semester Project   **Spring 2021**
- Created an interactive Tableau dashboard producing visualizations regarding product and geographic sales data.
- Generated predictive models using scikit-learn to predict customer product purchases to improve target marketing.

NYPD Crime – Data Management Systems Final Project   **Spring 2021**
- Designed and implemented a back-end MySQL Workbench database containing crime information.
- Connected the back-end database to a front-end PHP user interface allowing for user data manipulation.