

PROFESSIONAL EXPERIENCE

WesTech Engineering LLC Salt Lake City, UT

5/2021 - 12/2022

Data Engineer and Scientist

- Developed data mining algorithm to locate and obtain data across 1,300 Excel workbooks.
- Created algorithms to predict outcome of bid scoring to win probability with machine learning: increased win or loss predictability by 20%.
- Constructed and developed a data warehouse for company data with Azure Data Factory and ETI.
- Expanded influence of Human Resources to retain talent, using employment data and data analysis.
- Created and deployed inventory systems for After Market parts and contacts maximizing efficiency and increasing sales with Flask, html and css.
- Constructed predictive algorithm for optimal times of contact to customers for maintenance.
- Used data modeling and Random Forest Algorithm with data analytics to develop pricing models tailored to customers.
- Designed custom dashboards for company financials and product analysis in Power BI.
- Curated web applications for company use while using C-sharp and blazor.
- Technology: Python, SQL, Azure SQL Database, Azure Data Factory, C-Sharp, Power BI, sklearn, pandas

IM Flash Lehi, UT

6/2018 - 8/2019

Probe Process Technician Intern

- Finished production with completing circuits of semiconductors for end users.
- Inspected product for errors to relay to fabrication engineers, increasing and maintaining quality production.
- Created optimization program prioritizing engineering tests and creating dynamic SQL tables with python and mysql.
- Prevented product downgrade: discovered product near expiration and released hold.
- Maintained product quality and efficiency in fabrication process.
- 14-months Clean Room Experience in full body and face mask personal protective equipment (PPE).
- Technology: Python, MySQL, Tableau, Linux

DATA SCIENCE PROJECTS: University of Denver

Exercise Classification from Images and Videos:

- Generated training data of various exercises: push-ups, jumping jacks and body squats.
- Detected key body points and gathered angle data from reference pictures to create dataset: Python, TensorFlow, MediaPipe, Ubuntu
- Analyzed data locating correlations between exercise: Seaborn
- Created classification algorithm with Random Forest Classifier and tested on real world data in picture and video form, 0.96 Accuracy and F1-Score: Python, OpenCV, Sklearn

Las Vegas Golden Knights Goal Analysis:

- Web scraped data from ESPN.com for hockey shot, hit, blocks, saves and goals scored over the season: Python, bs4, Pandas
- Obtained action and team data from CSS code for all points location and constructed rink map: Python, regex
- Analyzed data locating correlations between actions and goals.
- Created Silhouette analysis locating optimal number of clusters for goals; applied to actions to find rink zones: K-means

EDUCATION

University of Denver 2022

Masters of Science - Data Science

University of Utah 2020

Bachelors of Science - Chemical Engineering; Minor: Applied Mathematics, Data Analysis

LEADERSHIP

WesTech Engineering Inc. Salt Lake City, UT 5/2022 - 8/2022

Data Science Internship Mentor: Mentored intern in data cleaning techniques and taught data analysis flows with simple projects.

TECHNICAL SKILLS

Python, C-Sharp, SQL, NoSQL, Unit Testing, Azure, Azure Data Factory, Unix, Data Analysis, Microsoft Excel VBA, PowerPoint, Power BI, Natural Language Processing (NLP), Data Visualization, Dashboard, Data Mining, Pandas, Numpy, Scipy, SparkPY, Statistical Modeling, Data Monitoring, Data Pipelines, Big Datasets, Data Modeling, Data Warehousing, Pattern Recognition, Machine Learning, Data Models, Data Engineering, Data Management, ETI, Databricks, OpenCV, Seaborn, Sklearn