JOSEPH TRAN

tranjoseph11@gmail.com (484) 538-5604 Philadelphia, PA joseph-l-tran JLtran11

SUMMARY

Process oriented data analyst experienced in cleaning, interpreting, and analyzing data to support RCT's in a developing nation while using a diverse set of tools to furnish data visualizations, summaries and reports that support policy recommendations.

SKILLS

PYTHON: Pandas, scikit-lean, numpy, seaborn, stats_models
MACHINE LEARNING: Classification, Regression, Clustering, Feature Engineering/Selection
DATA VISULAIZATION: Tableau
SQL: Joining, Anaylsis, sub-queries, temporary tables
EXCEL: pivot tables, v-lookup

PROJECTS

Music Recommender Mar. 2020 - Aug. 2020

Created a music recommendation system using the nowplaying-RS dataset containing roughly 17 million listening events. Data was cleaned, and three separate files representing listening event log, associated hashtags, and sentiment scores were combined into one data frame for analysis. Matrix factorization algorithms from ALS and Lightfm are used to find latent features of the user/item matrix to make user predictions. AUC scores from each model are benchmarked against popularity recommendations. ALS and Lightfm are shown to outperform popular recommendations by 4 and 6%, with popularity AUC = 0.875, ALS = 0.916, and lightfm = 0.937

Loan Default Predictor Sept. 2020 - Current

Created loan default prediction model using Imperial College of London's dataset containing roughly 800 anonymized features, and 150,00 samples. Filter and ensemble feature selection methods are used in addition to dimensionality reduction to find an optimal set of features for the model. Datasets from the results of the 3 methods are used for modeling. Various classification algorithms are tested to find the optimal model and parameters via random_searchCV, and are benchmarked against an XGBoost classifier. Logistic Regression is used along with ensemble methods.

EXPERIENCE

Katrina Hann Industries, *Data Science Fellow* Apr. 2000 - Oct. 2020

- Provide data cleaning and reporting services for private health data in Sierra Leone
- Automate data file ingestion with python and glob to reduce load time from one week to several minutes
- Create and maintain Sankey diagram to track importation and distribution of pharmaceuticals
- Ad hoc statistical analysis

Springboard, *Data Science Fellow*, Philadelphia, PA Feb. 2020 - Dec. 2020

Completed multiple learning modules and two capstone projects to fulfill graduation requirements for Springboard's Data Science Career Track

Freelance Consultant, *Freelance Consultant* Jan. 2018 - Jan. 2019

- Served as project manager
- Coordinated with stakeholders to plan and implement 33 room motel remodel
- Hired contractors to complete work
- Sourced and procured all materials for project
- Completed project two weeks ahead of schedule and 6% under total budget

Robson Forensic, *Mechanical Engineer Intern*, Lancaster, PA May 2016 - Aug. 2016

- Created finite element model to study stress and deflection as a result of wind interactions. Hand calculations within 7 percent of computer model.
- Responsible for design calculations and product development for intellectual property claims.
- Participated in field inspections in conjunction with associated experts.
- Produced mechanical drawings as they relate to intellectual property claims.
- Assisted in proper documentation and evidence collection as it relates to the forensic engineering field.

Istar Productions, *Audio Engineer*, Boston, MA / Las Vegas, NV July 2005 - Mar. 2010

- Increased 2008 yearly revenue by 43% through client outreach and acquisition
- Used Pro Tools HD and a wide array of VST plug-ins in conjunction with hardware outboard processing units to mix audio to the industry standard
- Worked with clients to develop desired feel and sound within specific genres
- Musical Director for client live performances and multi-state tours
- Sought out, and hired professional musicians for live client performances
- Served as client relationship associate to ensure final product fit within the artist's musical vision

EDUCATION

SUNY Maritime Sept. 2014 - May 2017
B.E Mechanical Engineering

Lehigh Carbon Community College Sept. 2010 - May 2013
A.S. Mechanical Engineering