SHRESHT VENKATRAMAN

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EDUCATION

Indiana University, Luddy School of Informatics, Computing, and Engineering| Indianapolis, IN
Master of Science in Applied Data Science ***Jan 2025***
University of California San Diego |La Jolla, CA
Bachelor of Arts in Economics| Minor: Data Science ***Dec 2023***

WORK EXPERIENCE

ALGORITHMS ENGINEERING INTERN - Corsaire Co. | San Diego, CA ***July – Dec 2023***

- Developed back-end data dependencies and backbone database infrastructure for a new 'Key Opinion Leaders'(KOL) identification product. Resulted in a database of 8 million 'opinion leaders' in the drug development industry.
- Built automated data-mining systems using Python, Solr, R and SQL to collect data from 7000+ medical journals, conferences, and publications saving manual searching time by 45%
- Led the development of automated ETL processes that ingest data from disparate sources to create individualized KOL profiles

FINANCE & DATA SCIENCE INTERN - Advent International | Boston, MA ***June - Aug 2022***

- Designed and built Tableau dashboards for 8 firm departments using 5-years of financial data. Improved the firm's ability to compare expenses across departments and recognize key performance indicators.
- Facilitated the production of weekly financial reports to management including CFO, CEO, and Managing Partners by producing statistical and visual analytics using Python and Tableau.
- Programmed a custom Python algorithm to automate data-cleaning and restructuring processes for the FP&A department. Increased efficiency by saving 10+ hours of manual data-cleaning
- Built a 'Deal-Stage Meter' for the firm's 3 global tax teams to accurately track the status of individual deals and manage timelines for tax compliance. Greatly improved the coordination and management between firm's Boston, London and Luxembourg tax teams

DATA SCIENCE PROJECTS

Stock Prediction System | Project Committee: UCSD Data Science Student Society ***Jan – July 2023***

- Collaborated with a 5-member team to develop machine learning models to predict opening prices of a stock using Random Forests, LSTMs, Koopman Neural Networks implemented using TensorFlow and Scikit-learn.
- Calculated and graphed the Efficient Frontier for a given portfolio by minimizing the Portfolio Volatility and maximizing the Sharpe Ratio using Python.
- Developed a predictive model for stock prices utilizing the Twitter API to scrape tweets and perform NLP Sentiment Analysis on Twitter activity.

Predicting Political Party from Stock Portfolios ***November 2022***

- Used the 'House Stock Watcher" data set of stock-market trading activity of members of the House of Representatives between 2020 to 2022.
- Predicted political affiliation from a stock portfolio by creating Scikit-learn Pipeline incorporating RandomForest Classifiers, One-Hot Encoding and Grid-Search for hyperparameter optimization.
- Tested for insider trading by using permutation testing to assess missingness of values and detect party-wide preference for a stock.

Statistical Language Model of the Shakespeare Corpus ***November 2022***

- Developed Uniform, Unigram and N-Gram probabilistic models to predict the probability of a given text being written by William Shakespeare

TECHNICAL SKILLS

LANGUAGE: Japanese (JLPT N3), French (DELF B1), Korean, Hindi (Native), Tamil
DATA ANALYSIS & PROGRAMMING: Python, Java, SQL, Excel, Stata, R**,** Tableau
PUBLIC CLOUD: AWS Machine Learning Specialty Certification
FINANCE: Financial accounting, Statistics, Econometrics and Probability