# SHRUTIKA SANKAR

■ shrutikasankar@gmail.com | \ (203) 448-0479 | \ Ridgefield, CT | Linkedin: shrutika-sankar | OShrutikaSankar/Springboard

## **SUMMARY**

I am a professional with 8+ years of experience leveraging data to execute business solutions on behalf of Fortune 500 companies. I have experience using STATA, Python, VBA, SQL, and Tableau for data analysis workflows including data wrangling, model building, model validation, and data visualization techniques. Currently, I am completing the Springboard Data Science Bootcamp and seeking data science roles where I can work in a team setting to solve important business problems.

## **EMPLOYMENT**

## Residual Value Insurance (RVI) Group, Passenger Vehicles Department

**2015-2020**Stamford, CT

Data Analyst, Business Intelligence

- Crafted statistical and economic models in Stata and Python; responsible for all model validation and data visualization.
- Created, automated, and managed index of auction used vehicle prices (UVPI) in USA and Canada using VBA and SQL server.
- Led 4 member team as Agile Scrum Master in quarterly risk assessment, forecast, and visual reporting for Lease Portfolio Accounts for 10 clients.
- Predicted likelihood of return and price if returned for each leased vehicle in client's portfolio based on client, industry, and macro-economic data.

#### Benevue, Quantitative Analytics Software Startup

2013-2015

Manager, Planning and Analysis

Bridgewater, NJ

- Managed customer databases and utilized data analytic tools to create business reports, project future sales growth, and develop risk assessments.
- Drove business strategic planning and analysis, including making presentations for weekly investor relations and board meetings.
- Designed QA systems including test strategy, test plans and test execution of stress & performance tests, regression tests, and UAT for desktop application and software deployed on peripherals.

Tufts University 2011-2013

Teaching Assistant (TA)

Medford, MA

- TA for Undergraduate Game Theory Class (School of Art and Sciences) for 4 semesters.
- TA for Graduate Level Micro Economics and Statistics Class (Fletcher School of Law & Diplomacy) for 3 semesters.

## FEATURED PROJECTS

#### Using Machine Learning to Forecast Online Vehicle Prices (Springboard Capstone)

2020-2021

Developed hyperparameter tuned Random Forest Regression to predict online used car values ranging between \$100 and \$80,000.

- Python Tools: NumPy, Pandas, Scikit-learn, Seaborn, SciPy.
- <u>Data Wrangling:</u> techniques included box plot univariate graphing, scatter plot multivariate outlier removal, iterative imputation and variance scaling.
- Model Selection: Tested 8 supervised learning models, including Linear Regression Models (e.g., Elastic Net) and Tree Based Models (e.g., Random Forest).
- Compared models MAE and MPE performance on validation dataset to finalize model.

## Index of Wholesale Used Vehicle Prices (RVI)

2016-2018

Using STATA developed a multivariate logistic regression to forecast market level pricing using individual vehicle prices twice a month.

- <u>Data Cleaning:</u> Tokenization, stemming, duplicate removal, IQR outlier identification and removal.
- <u>Data Munging</u>: Seasonal and inflation adjusting of prices, clustering vehicles by MMY, and mapping vehicle model to segments.
- Feature Selection: Multicollinearity checks, sequential forward variable selection, correlation selection, feature importance
- <u>Data Visualization and Automation:</u> Publication utilized Excel, PowerPoint, and PowerBI with automation accomplished using VBA
- <u>Business Impact:</u> Reduced prediction volatility by 20%; increased reporting frequency from once to twice a month, while doubling number of sub-indices.

## **EDUCATION**

#### **Springboard**

Certification Data Science 2021

Data Science Bootcamp in Python focused on Machine Learning with modules focused on supervised and unsupervised learning

## Data Science Dojo

Certification Data Science and Data Engineering 2019

#### **Tufts University**

MS Quantitative Economics 2013

#### Wellesley College

BA Economics 2011

Minors Math & South Asian Studies

## **SKILLS**

Languages: SQL, Python, Lyx, Eviews, STATA

Database Tools: MySQL, SQL Server, Advanced Excel (e.g. VBA), Access

Data Modeling: Machine Learning, Ensemble Methods (e.g. Random Forest), Gradient Boosting, Multivariate Logistic Regression, Factor Analysis, K-nearest

neighbors, ANOVA

Data Visualization/Storytelling: Tableau, PowerBI, Gliffy, Seaborn (Python)

Past Experience With: Github, NoSQL, PostgreSQL, R Studio, Azure ML, CSS, Google Analytics