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Prashanth Thirukkurungudi Sekar
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EDUCATION
Master of Science, Data Science · Indiana University Bloomington, USA (GPA: 3.97) · Aug 2018 - Dec 2019
Bachelor of Technology, Computer Science and Engineering · SASTRA University, India (GPA: 3.76) · Jun 2012 - May 2016

ACHIEVEMENTS AND AWARDS
- Ranked among **Top 2% of the Data Scientists** in the world with the highest rank of 1,193 out of 81,627
- **Secured 3 Medals** (1 Silver and 2 Bronze) in **Kaggle** competitions
- One of the Winners of the **NSE-ISB** Code sprint conducted by **National Stock Exchange and Indian School of Business**
- **Developed and licensed an algorithm** built for **Fantasy Premier League** player points projections to a draft platform
- **Dean's Merit Scholarship** for academic excellence during the academic years 2012-13, 2014-15 and 2015-16

TECHNICAL SKILLS
- Languages: R, Python, C++, SQL, Hive, Spark
- Softwares: R Studio, Jupyter Notebook, Power BI, Tableau
- Libraries/Packages: data.table, dplyr, DMwR, shiny, sparklyR, ggplot2,caret, pandas, numpy, scikit-learn

WORK EXPERIENCE
TransUnion LLC, (Chicago, USA) – Senior Data Scientist   Jan 2020 -Present
- Develop predictive models and business intelligence solutions for various financial service institutions
- Collaborate with internal and external partners to deliver innovative analytical products and insights
- Drive new business initiatives and deliver long term value-added product propositions for B2B customers

TransUnion LLC, (Chicago, USA) – Data Science Intern   May 2019 – Dec 2019
- Built a single scorecard solution to predict the likelihood that a consumer would take a certain action to help lenders target the top segment of the population
- Formulated a new definition for the target variable and built a XGBoost classifier as the "Champion model" to predict the same and obtained a lift of 11.2% over the benchmark score
- Developed a challenger model using Regularized Greedy Forest which resulted in an additional lift of 5% when compared to the champion model
- Developed custom attributes and algorithms for raw credit data followed by an audit of the items in production
- Built a custom model to predict the likelihood of a consumer falling under a specific legal process as a part of the innovation lab for an online lender

Indiana University (Bloomington, USA) – Research Assistant   Oct 2018 – Present
- Analyzing the factors impacting Opioid and other narcotic overdoses across the country through exploratory data analysis and fixed effects regression models
- Explore the impact of Medicaid work requirement legislation on employment and medicaid enrolments in the states of IN, AK, KY and NH through interactive visualizations and dashboard using PowerBI and ShinyR

Customer Analytics India Pvt Ltd (Chennai, India) – Data Analyst   May 2016 – May 2018
Item Recommender System
- Developed a recommendation system using the "Item Based Collaborative Filtering" algorithm for one of the largest furniture manufacturers in the US and built a predictive model to identify the probability of a customer returning thereby helping in the email marketing campaign
- Implemented logistic regression to predict the probabilities after balancing the data using Synthetic Minority Over Sampling Technique
Demand Forecasting
- Collaborated with a team of 3 others to building a forecasting model projecting the sales of newly launched and existing items
- A month-ahead forecast followed by real time daily updates on the forecast were provided using L2 Regularized regression
Multi Model Fusion
- Worked on building an automated forecasting tool to provide generic forecasts
- Developed several variants of linear regression followed by machine learning algorithms such as Gradient boosting, Random Forest and a few time series models involving ARIMA, Holt-Winters and Exponential Time Series
- An ensemble of the above-mentioned models was built using a Non-Negative Least Square Regression in R

PROJECTS
Transfer Market Analysis using Machine Learning   Apr 2021 – Aug 2021
- Built a predictive model to forecast the market value of soccer players in the top 5 European leagues
- After Feature Engineering, multicollinearity was removed using Variance Inflation Factor (VIF) and an ensemble of linear regression and gradient boosting was implemented to predict the market value ([Link](#))

Exploration of Factors affecting Medical Expenses   Mar 2019 – Apr 2019
- An exploratory data analysis to study the relationship between BMI and medical charges for people of different age group and smoking habits
- A local regression (LOESS) model was developed to capture the non-linear trend present in the data to explain the relationship present in the research question ([Link](#))

Customer Revenue Prediction Using Google Analytics Data   Sep 2018 – Dec 2018
- Predict revenue generating customers, forecast revenue generated by identified customers and calculate the lifetime value of the customers
- Regression, random forest and gradient boosting were implemented for the first two business questions followed by the Betageofitter and Gammafitter model for predicting the lifetime value of a customer ([Link](#))