

# LakshmiVenkatasubramanian

[lakshmi2688@gmail.com](mailto:lakshmi2688@gmail.com) | [Linkedin](#) | [Portfolio](#) | [Github](#)

Greater Seattle Area

626-487-8857

## Summary

- Over 10 years' experience spanning Test Engineering and Data Analytics, supporting and driving projects end to end.
- Demonstrated leadership through industrial experience in various domain and customer settings.
- Strong experience using SQL and programming using Java, R and Python
- Implementation of Machine learning models such as Ridge Regression, logistic regression, Support Vector Machine, Principal Component Analysis, K-means clustering and LASSO mathematically and using analysis packages such as NumPy, Scikit-learn, Pytorch and pandas.
- Strong understanding of the concepts of Experimentation Design such as A/B testing, Hypothesis Testing, ANOVA, Linear Regression.
- Knowledge of Statistics and end to end Data Science process, Exploratory Data Analysis/Data Mining and data visualization using Tableau and Power BI.

## Education

- **Master's in Data Science**, University of Washington, USA (GPA 3.88/4) **(2019-2022)**  
Relevant coursework (through Summer 2020) - Applied Statistics and Experimentation Design, Introduction to Probability and Statistics, Data Science process, Special Topics in Data Science, Statistical Machine learning, Data Visualization
- **Bachelor of Engineering in Electrical and Electronics**, Anna University, India (GPA 3.7/4) **(2005-2009)**

## Projects

- **Predict Education Costs**: The goal of this [project](#) is to predict education costs of 4-year public university program in USA and identify the most influential predictor variable based on accuracy and model assumptions. GLM model predicted with 96% accuracy.
- **Analysis of Housing Prices**: In this [project](#), the association between the price per night of a listing is assessed based upon a variety of factors and attempt to determine whether the impact of said factors changes based upon the city market using a Poisson regression model.
- **Streaming Platforms Comparison**: The goal of the [project](#) is to create an interactive visualization that can be perceived as a go-to marketplace for comparing popular streaming platforms on various metrics such as Genre, content type, average IMDb rating.
- **Customer Segmentation**: The goal of this [project](#) is to develop a customer segmentation using K-means clustering and Principal Component Analysis to classify customers into different clusters in order to understand the marketing strategy. The sample Dataset summarizes the usage behavior of about 9000 active credit card holders.

## Relevant Experience

**Senior Test Engineer**, Puget Sound Energy **(Jun 19 - Current)**

- Lead Data Analytics projects collaborating with Business users and cross-teams, making recommendations to test approach and test strategy, and mitigating project timeline constraints.
- Tested end to end ETL workflows and Business use cases through SQL queries, enabled Data-Driven decision making by contributing to the analysis and validations of 2 major Power BI Analytics Dashboards to the End Customers.
- Identified root cause of high severity defects in the Python Data Science features that impacted 40% of data.

**UAT Test Lead**, Microsoft (Tata Consultancy Services) **(Dec 17 - Aug 18)**

- Delivered a cross-functional Partner Rebates project that uncovered major gaps in the Rebates Eligibility program and contributed towards Revenue Protection saving thousands of dollars.
- Built well-equipped test team of 8 from scratch that increased the productivity by 90%.
- With no proper documentation or knowledge transfer, learnt the business process workflows by debugging the stored procedures, doing data analysis and meeting with the business experts in various time zones.

**Software Development Engineer in Test**, Liberty Mutual (Tata Consultancy Services) **(Jul 16 - Nov 17)**

- Maintained development, testing of applications, and supported Agile teams resulting in 2 major customer facing releases.
- Automated testing web services using SOAP UI, Groovy, and User Interface using Selenium TestNG web driver that resulted in reduction of execution time and manual efforts by 60%.
- Reported product quality metrics to aid in product release criteria such as high and critical defects, user experience and usability defects, regression testing metrics, test scripts executed and passed.

## Additional Information

- Won second place in Husky AI Hackathon 2020 out of the 12 teams and contributed towards the design of the User Interface.
- Grace Hopper Student Scholar 2020 sponsored by University of Washington.