# Sharvari Kalgutkar

#### Education

Masters in Data Science, University of Southern California

Data Analytics, Data Visualization, Database System, Machine Learning, Data Mining

Aug. 2022 – May 2024 (CGPA 3.85/4)

Bachelors in Electronics Engineering, Sardar Patel Institute of Technology

Aug. 2018 – May 2022

Data Structure, Algorithms, Statistical Analysis, Object Oriented, Marketing, Management

(CGPA 9.52/10)

## Experience (1 Year)

Data Scientist, University of Southern California

Feb 2024 - Present

- Performed visual data analysis of 10+ data model's performance using Python, Matplotlib, and Seaborn, to enhance energy and cost efficiency, leading to 45% cost improvement.
- Presented stakeholders with cost and energy comparisons of models using line charts and model flowcharts.

### AI Engineer, Scientist Technologies

Nov 2021 – May 2022

- Automated ETL data pipeline for 720+ hours of video data from Google Cloud to AWS S3 via REST API, significantly reducing operational time by 90%.
- Cross-collaborated on 5 Python algorithms for road safety data analysis using Agile, achieving a 91% R2 score.
- ullet Implemented data visualization using OpenCV video processing, delivering a 3x quality assurance boost.
- Orchestrated ML workflow with AWS EC2 for model training, CVAT for data quality, and AWS S3 data storage.

#### Data Scientist/ Machine Learning Engineer, Skinzy Software Solutions

Oct 2020 - Jan 2021

- Collected and analyzed data using Python and Excel for skin treatment recommendation system.
- Constructed a CNN Computer Vision model in TensorFlow to detect skin diseases, achieving an IOU of 0.6.
- Deployed a ResNet-50 Deep Learning model for skin disease classification, yielding an accuracy of 85%.

## **Technical Skills**

Data Visualization: Tableau, Power BI, D3.js, Matplotlib, Seaborn, Plotly, ggplot, Excel

Programming: Python, R, HTML, CSS, JavaScript, Flask | Big Data: PySpark, Databricks, Hadoop, ETL

Data Libraries: Pandas, Numpy, Scikit-Learn, TensorFlow, PyTorch | Tools: AWS, GCP, Alteryx, Docker, Git, Linux

Datbases: MySQL, MS SQL Server, Firebase, MongoDB, AWS S3, AWS RDS, AWS DynamoDB, PostgreSQL

# **Projects**

E-commerce Global Market Data Analysis 🔗 | Data Analysis, Data Visualization, Python, Matplotlib, Seaborn, Plotly

- National Finalist with a rank of 7 out of 600+ teams at the Business Data Analytics at IIT Delhi.
- Engineered data visualizations using Python, Matplotlib, Seaborn, and Plotly, featuring Barplots, Line Charts, Box Plots, Squarify plots, and World maps to analyze sales trends of 6 e-commerce markets.
- Communicated to stakeholders' seasonality trends, customer retention to identify top markets.

Starbucks Data Analysis 🚱 | Data Visualization, Statistical Analysis, Dashboard, D3.js, Mapbox, HTML, CSS

- Designed D3.js Dashboard to analyze Starbucks' store location strategy, KPIs and optimize decisions.
- Built Mapbox Starbucks store locator map for LA, improving user navigation and accessibility to stores.
- Executed global, country, and state analysis using **diverse data visualizations**, including Bar Charts, Scatterplots, Proportional Symbol maps, and Choropleth maps.

#### Layoffs Dashboard | Tableau

 $\bullet \ \, Link: \ \, https://public.tableau.com/app/profile/sharvari.kalgutkar/viz/NavigatingChangeTheLayoffsLandscape$ 

#### Spotify Trending Hits Dashboard | Tableau

Link: https://public.tableau.com/app/profile/sharvari.kalgutkar/viz/SpotifyTopCharts202

Happiness Quotient Data Analysis & Data Analysis, Management, Firebase, NoSQL, MySQL, Hadoop MapReduce

- Managed Firebase & SQL distributed file storage for analyzing Happiness Index, GDP & unemployment.
- Engineered a web command-line interface in **Python and JavaScript** and **analyzed** user uploaded data for key trends like Top 10 GDP countries, Maximum Unemployment for Females in a given year.
- Deployed Flask website with Hadoop-like MapReduce for fast parallel data analysis & data search.

Big Data Yelp Business Recommendation System & | Data Mining, Big Data, Spark, JSON, Collaborative filtering

- Built an PySpark Recommendation System for predicting rating for 1.5M users and 200k businesses.
- Executed Item-based and ML-based Collaborative filtering using XGBoost Regression, yielding RMSE of 1.
- Created an enhanced hybrid recommendation system with data mining, reducing RMSE to 0.97.