# YASHASHWITA SHUKLA

yshukla@ucsd.edu | +1 (858) 281-1687 | 4067 Miramar Street, La Jolla, CA - 92037 | LinkedIn | Portfolio | GitHub

### **EDUCATION**

## University of California San Diego, La Jolla, CA

Master of Science, Data Science

Sep 2022 – Dec 2023

**GPA: 3.96** 

• Relevant Courses: Data Science in Biomedicine, Intro to Visual Learning, Machine Learning, Statistical Models, Algorithms for Data Science, Probability & Statistics, Data Management, Scalable Data Systems, Numerical Linear Algebra.

Bharati Vidyapeeth University, Pune, India

Jul 2014 – Jun 2018 GPA: 9.54

Bachelor of Technology, Information Technology

Relevant Courses: Data Structures, DBMS, Design and Analysis of Algorithms, Neural Networks, Distributed Systems.

### **SKILLS**

- Languages: Python (Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch), R, SQL, Java, Node.js.
- Machine Learning: Forecasting, Optimization, Regression, Classification, Computer Vision, GANs.
- Databases: MySQL, PostgreSQL, DynamoDB, Teradata, Cassandra, Neo4j, MongoDB.
- Visualization: PowerBI, Tableau, Streamlit.
- Cloud & Development: AWS, Git, Docker, GraphQL, Talend, Dask, ApacheSpark.

### **EXPERIENCE**

## Arya Lab at University of California San Diego

La Jolla, CA

**ML** Researcher

May 2023 – Present

- Researching and optimizing sparse dataset classification using logistic regression and projected gradient descent.
- Determining minimum sample requirements for accurate classification to enhance efficiency in real-world applications.

## Hnasko Lab at University of California San Diego

La Jolla, CA

Student Research Engineer

May 2023 - Present

- Automating volitional vapor inhalant paradigm experimental setup and data collection using MedPC, Arduino, and Python.
- Managing and analyzing datasets to derive meaningful insights into nicotine addiction.

### Accenture

Bengaluru, India

**Senior Analytics Consultant** 

Oct 2021 – Aug 2022

- Deployed an Intelligent Active Merchandize Markdown solution across 8 customer groups under a Fortune 500 Fashion Retail Firm.
- Fabricated an AI solution to forecast fabric & style performance, enhancing both design and purchasing strategies while reducing waste.
- Forecasted commodity prices for up to six months with 96% accuracy to help businesses create an efficient purchase plan.

Supervised junior team members in developing Machine Learning models throughout short and long-term projects.

## **Analytics Consultant**

Bengaluru, India Oct 2020 – Sep 2021

• Optimized transportation routes along with Vendor and Rate Contract Analysis, resulting in cost savings of \$25 million annually.

- Led the development of a go-to-market solution for Vendor Management and Inventory Optimization, ensuring improved efficiency.
- Reduced time-to-market chemical products by 75% through strategic experiment planning and adaptive learning.

### Accenture

Accenture

Bengaluru, India

**Business Analyst** 

Jul 2019 - Sep 2020

- Engineered an interactive Spend Analytics Solution to identify savings opportunities and recommend an efficient Purchase Order Plan.
- Created a reporting dashboard to monitor Spend, Supplier Quality, Inventory levels, and consumption of 1500+ commodities.

## Accenture Data Analyst

Bengaluru, India Jun 2018 – Jun 2019

Developed and maintained ETL jobs to automate the extraction of data from clients' CRM to PostgreSQL Database.

Implemented Rest and GraphQL APIs utilizing Spring Boot and AWS AppSync for Mobile and Web Applications.

## ACADEMIC PROJECTS

## Visualizing the Impact of Layoffs (Python, Streamlit)

Jul 2023

- Conducted a comprehensive visual analysis to examine the global impact of layoffs since 2020.
- Utilized interactive visualizations to present valuable insights into the affected sectors, geographical distribution, and trends.

### Text to Image using DCGAN (Python, PyTorch)

Jun 2023

- Synthesized images from textual descriptions using a Generative Adversarial Network inspired by DCGAN on CUBS dataset.
- Incorporated a text embedding module allowing the model to successfully learn the mapping between texts and images.

#### Image Compression (Python)

Dec 2022

- Performed Image Compression from scratch with Singular Value Decomposition (SVD) and Discrete Cosine Transform (DCT).
- Observed DCT resulted in less distorted images compared to SVD even at higher compression ratios.

## Technology Forecasting (Neo4j, MongoDB, PostgreSQL, and Python)

Dec 2022

- Analyzed technology shift companies are adopting based on published research and filed patents.
- Reported countries and companies contributing towards booming industries, in the last few decades.