

+1 317-717-0962
Indianapolis
gupta.saksham98@gmail.com

Saksham Gupta

Blog: /thinkspace
GitHub: sakshamio
LinkedIn: sakshamio

EDUCATION

Master of Applied Data Science

08/2022 - 12/2023 (expected)

Indiana University - Purdue University, Indianapolis (IUPUI)

Grade: 4/4

Primary Courses: Biostatistics, Computer Vision, Quantum Computing, Remote Sensing, etc.

Work Experience:

- *Research Assistant* working with Prof. Nian Wang of the Wang lab at Indiana University School of Medicine - focusing on developing novel quantitative MRI techniques and 3D printing methods for the Central nervous and musculoskeletal systems.
- *Teaching Assistant* for the multiple courses at the School of Informatics and Computing (SoIC): 2D Animation, Advanced 2D Animation, and Motion Graphics

Bachelor of Computer Science and Technology

07/2016 - 09/2020

Vellore Institute of Technology, Tamil Nadu, India

Grade: 3.69/4

Extra-curricular Positions: President - Deccan Chronicles (The Literary Society) / Vice President - Bulls and Bears (The Finance Club) / Core Committee Member - IEEE Computer Society and IETE India / Radio Show Host - VIT Community Radio

WORK EXPERIENCE

Data Science Associate Consultant

06/2022 - 08/2022

ZS Associates

Bangalore, Karnataka, India

- Led a team of developers working on the Plotly based Dash enterprise suite to deploy a large scale company-level web application
 - Worked towards speeding up loading times of certain components by more than 75% using cache memoization and session storage techniques
 - Implemented Active directory based access management system
 - Implemented high throughput data ingestion pipelines and APIs to help pool and visualise data from different business units
- Helped the EU5 (UK, Germany, France, Spain, and Italy) based Value and Access team in understanding how Natural Language processing (NLP) techniques can be used on clinical trial data to analyze and predict HTA (Health technology Assessment) outcomes.

Data Science Associate

08/2020 - 06/2022

ZS Associates

Bangalore, Karnataka, India

- Worked on propensity modeling, linear optimization, and market segmentation for leading US bio-pharmaceutical client
 - Translated legacy code from R to PySpark resulting in 150% pipeline speedup.
 - Converted national level optimization model to 300 territory level models for greater flexibility, and personalization.
 - Expanded project scope from a single drug to three client portfolio drugs, in diverse areas like Cardiovascular diseases, Migraine, and Auto-Immune diseases.
- Worked on Transportation optimization proof-of-concept for leading Japanese pharmaceutical client for their new portfolio drug.
 - Built Dynamic Tableau Dashboard that allowed end users to simulate different transportation scenarios.
 - Used Geo-spatial remote sensing to find treatment centers most suitable to patient requirements.

- Co-founded a ZS internal podcast to interview top ZS leaders in the Data science and analytics space, to understand and document their career journeys, and key learnings. Interviewed 8 data science Principals with average Industry experience of 20 years.
- Worked on internal ZS point-of-view towards using quantum computing techniques for speeding up core life sciences functions like drug discovery/re-purposing, large scale optimization.

Product Engineering Intern

Stylumia Intelligence

02/2020 - 07/2020

Bangalore, Karnataka, India

- Implemented cutting-edge Deep Learning algorithms for product segmentation as well as automatic attribute extraction from large fashion image datasets.
- Worked with the Director of Technology to setup an in-house data labelling tool which enabled Fashion experts to label and store large datasets for use in computer vision applications.
- Centralized several scattered image datasets and wrote wrappers to convert them into a standardized COCO format for easy access. Used tools like OpenCV, pycocotools, Numpy, etc.
- Improved IoU (Intersection-Over-Union) of existing semantic segmentation models by more than 50%.

Data Science Associate Intern

ZS Associates

05/2019 - 07/2019

Bangalore, Karnataka, India

- Worked with the Advanced Data Science team on leveraging storytelling and XAI (Explainable AI) techniques to make complex Machine learning algorithms interpretable.

Technology Intern

American Express

05/2018 - 07/2018

Gurgaon, Haryana, India

- Focused on building a Financial Forecasting tool using Deep learning based time-series ensemble tools.

RESEARCH EXPERIENCE

- Sponsored by the CS department to participate in the *International Workshop on Pattern Analysis and Applications*, Indian Statistical Institute, Kolkata
- Paper on Explainable Machine Learning accepted at the *Frontiers of Intelligent Computing: Theory and Applications* conference, NIT Surathkal
- Worked with Prof. Santhi V (CS HOD) on SAR (Synthetic-Aperture Radar) Image de-noising to remove salt and pepper noise from satellite based remote sensing systems for the *Indian Space Research Organization*

SKILLS

Programming	Python, R, Julia, PySpark, Git, L ^A T _E X, Matlab, Markdown, HTML, Javascript
ML Packages	Numpy, Pandas, Scikit-learn, Tensorflow, Pytorch, JAX
Visualization	Tableau, Plotly, Matplotlib, Seaborn, D3.js
Other	ArcGIS, Airflow, Google Earth Engine, Github, Microsoft Office
Communication	English (native), Hindi (native), German (intermediate), Russian (beginner)