# Kumar Saurav Jha

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# **EDUCATION**

### The George Washington University

Washington, DC

Master of Science, Data Science

(expected May 2025)

Graduate Teaching Assistant for <u>Visualization of Complex Data</u>

**University of Pune** 

India

Bachelor of Engineering, Electronics and Telecommunication

(May 2019)

Extracurriculars: Chairman IEEE Students' Council, Editor SRUJAN (college) magazine

# PROFESSIONAL EXPERIENCE

#### 1. Consultant, Deloitte India LLP

Oct 2022 - July 2023

- Designed predictive ML models (classification and anomaly detection) for Shell Global Solutions Inc., to flag pipeline anomalies and optimize maintenance—significantly **reducing downtime** and **repair costs**.
- Leveraged NLP and Computer Vision techniques to analyze large volumes of equipment failure reports and technician notes, extracting critical insights and automating root-cause analysis.

#### 2. Data Analyst, Accenture Solutions Pvt Ltd

Sep 2019 - Oct 2022

- Designed and accomplished an automated data validation process using Power BI for Cargill Inc., eliminating the 2-hour daily manual effort by directly integrating SQL scripts into the dashboard and enabling real-time tracking of system replication metrics.
- Automated SAP S/4HANA tasks like Shipping Point Creation, and Fixed Asset Management, using SQL scripts for Cargill Inc, reducing manual efforts by 35% and cutting processing time by 50%.
- Designed a payment inquiry gateway for Nationwide Mutual Insurance, integrating automated text and email alerts, leading to a 20% increase in customer engagement and satisfaction.
- Worked closely with business stakeholders to define data requirements, improving the accuracy of **KPIs** and providing **actionable insights** for the operations team.

### **EXTERNSHIP**

## Build Student Consultant, The Build Fellowship by Open Avenues &

1. Painting with Pixels: Crafting a Portfolio of Generative Art Experiences

July 2024 - Aug 2024

2. Semantic Analysis of Social Media 🔗

Apr 2024 - Jun 2024

(For more details refer to "Build Project: A Generative Art Gallery" & "Sentiment Analysis on Indian Elections 2024" on LinkedIn)

# **PROJECTS**

1. Highlight Reel: Automated Sports Content Generation | Python - Independent

Nov 2024

- Volleyball highlight reel generation using **OpenCV** with transition effects, metadata-based game **liveness** filtering, and custom features like speed & acceleration; Achieved 90% recall with Logistic Regression;
- Improved transition stability using sliding window majority voting and minimum duration enforcement for smoother, visually appealing highlights.
- 2. Author Profiling on Blogpost Corpus | Python Academic 🔗

Dec 2024

- Implemented age-group prediction using blog text, author gender, and occupation, conducting a comparative analysis of static (GloVe 200) vs. contextual embeddings (DistilBERT), followed by training a Fully Connected NN; created balanced target variables, and modular PyTorch implementation (GPU CUDA ).
- 3. Strategic Customer Segmentation and Demand Prediction | Python Academic 🔗

- Segmented customers based on their spending behavior via KMeans clustering.
- For daily and weekly demand prediction, the XGBoost model was used; it provided a practical framework for effective inventory management, proactive adaptation to market changes, and targeted marketing.

#### TECHNICAL SKILLS

Languages: Python, R, SQL, CQL (Cypher Query Language), HTML, CSS, JavaScript

Databases: MySQL, MongoDB, and Neo4j

Tools: Excel, Tableau, Power BI(PowerQuery, DAX), Spark, PyTorch

**Product Development:** Agile Methodology, HP ALM, MVP model, Git, and Flask

**Certification:** IBM Machine Learning Specialization Ø, AWS Certified Developer - Associate Ø

