Sujay Shrivastava

🏠 45 Englewood Avenue, Buffalo, New York | 📞 716-617-1691 | ✉ sujay1829@gmail.com | 💼 LinkedIn | 🌐 Portfolio | ⓞ GitHub

Education

University at Buffalo	Jan 2023 - May 2024
Masters of Engineering Sciences - Data Science	*Buffalo, New York*

- **GPA**: 3.4 / 4.0
- **Relevant Coursework**: Statistics, Python Programming (Data Structures and Algorithms), Probability Theory, Numerical Mathematics, Data Intensive Computing, Database Models Query Language , Machine Learning

Skills

Programming Languages: Python, R, MATLAB, SQL (PostgreSQL, MySQL, SQLite3), C/C++, Java, Javascript, NodeJS, HTML, CSS
Frameworks: Flask, REST API, Fast API, TensorFlow, Keras, OpenCV, PyTorch, scikit-learn, Pandas, Numpy, Apache Hadoop, Apache Spark, DynamoDB, spaCy, Hugging Face, LangChain, OpenAI API, Gemini API, XGBoost, LightGBM
Tools: Google Cloud Platform, Azure, Metabase, Git, Zoho, Figma, Notion, IBM Watson Studio, Docker, Kubernetes, Excel, Microsoft Office, Power BI, Tableau, Postman, QGIS, DigitalOcean, Linux/Unix, Google Vertex AI

Experience

AI/ML Research Assistant	Sep 2023 - May 2024
University at Buffalo	*Buffalo*

- Implemented scalable and fault-tolerant Masked Auto Encoder with temporal embeddings of past 20 years for land cover analysis using multispectral satellite imagery resulting in 37% improvement in intersection over union.
- Improved MLOps pipeline efficiency by 5% by developing GCP cloud-native solutions to integrate docker containers and optimize models for large scale serving using Vertex AI endpoints.
- Accelerated project progress by creating deep learning based image segmentation pipeline using satellite imagery on GCP instances based on Linux kernel, saving $3,000 and breaking through 6-month standstill.

Data Scientist Intern	May 2022 - Aug 2022
Curelink	*Delhi*

- Saved approximately $500k by communicating projections to close non-profitable department and reallocating resources.
- Reduced churn rate by 3% by developing Power BI dashboard for new customer retention department with recursive and nested SQL queries up to 8 levels deep.
- Developed a C++ script to initiate data synchronization between Azure and ZOHO CRM Infrastructure for on-site operations, ensuring automated checks for double verification to minimize redundancy and enhance data accuracy by 25%.

Machine Learning Engineer Intern	Jan 2021 - Mar 2021
IIT Kharagpur	*Remote*

- Improved predictions by leveraging Natural Language Processing (NLP) and sentiment analysis on customer satisfaction data with 50k records, boosting accuracy by 30%.
- Boosted model accuracy by 15% through A/B testing and driving stakeholder consensus on a low-bias model, and integrated it into the frontend using Node.js with a REST API, enabling real-time predictions with a 50ms average delay.

Projects

Google Gemini ChatBot | *LangChain, Transformers, HuggingFace, Gemini API*
- Developed ChatBot based on GeminiAPI, reducing its latency by 10%, by implementing chat history and message cache.

Home Credit - Credit Risk Model Stability (Kaggle Competition) | *Credit Analysis, FinTech*
- Ranked in top 23% of competitors for achieving stability in credit risk model's prediction measured against custom metric.

Hill Climb Racing AI Agent Using RL | *Reinforcement Learning, Computer Vision*
- Implemented an object detection and PyTorch-based reinforcement learning AI agent to autonomously play Hill Climb Racing.

Spotilytics | *Database Administration, Tableau*
- Created synthetic relational database, optimized queries by 20% using indexing, moved to production, made Tableau dashboard.

US Accident Analysis | *Data Visualization, Feature Engineering*
- Modeled accident severity using multiclass classification on an 8 million record dataset, achieving 78% accuracy.

Achievements and Certifications

- Co-authored a paper titled **Artificial Intelligence and Machine Learning in Marketing: A Review of Recent Advances and Future Trends** in the European Chemical Bulletin.

- Led team to secure 3rd place in Blackstone Launchpad competition for leveraging AI and ML.

- Elected as Media Coordinator in junior and senior year and Associate Cultural Coordinator in sophomore year.

- Microsoft Azure: Azure AI Engineer Associate (AI - 102).