AUM SATHWARA | ML ENGINEER

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TECHNICAL SKILLS

- **Programming Languages:** Python, Java, JavaScript, R, C++, C#
- **Machine Learning & AI:** TensorFlow, PyTorch, Keras, OpenCV, Hugging Face, ONNX, Scikit-learn
- **Deep Learning Frameworks:** Transformers, LSTM, BERT, GPT Models
- **Data Engineering & Analytics:** Pandas, NumPy, Spark, ETL Pipelines, Data Cleaning, Flask, FastAP
- **Cloud Platforms:** AWS (SageMaker, Lambda), GCP (AI Platform), Azure (Machine Learning Studio)
- **DevOps:** Docker, Kubernetes, CI/CD, Terraform
- **Big Data Tools:** Hadoop, Apache Kafka, Google BigQuery
- **Visualization Tools:** Matplotlib, Seaborn, Tableau, Power BI
- **Operating System:** macOS, Linux, Unix, Windows

PROFESSIONAL EXPERIENCE

AI Engineer
TatvaSoft, Ahmedabad, India Jun 2022 – May 2023

- Developed NLP models to enhance search capabilities within a Library Management System for 1,500+ users, automating processes like book categorization and recommendation.
- Optimized hyperparameters of deep learning models, cutting training time by 32% and enhancing system accuracy.
- Enhanced system performance by optimizing backend processes, reducing response times by 25% and ensuring high availability during peak usage.
- Collaborated with a team of 4 engineers, implementing Agile workflows and fostering a knowledge-sharing environment to improve team output.

Machine Learning Engineer
ADVenture, Pune, India Apr 2021 – Oct 2021

- Designed and implemented a language translation and semantic categorization API, achieving 96.24% accuracy using advanced NLP techniques with TensorFlow, Keras, and PyTorch.
- Created modular microservices for scalable deployment, handling over 10,000 daily API requests while maintaining low latency.
- Improved model training pipelines, reducing training time by 17% and enhancing model performance by 15% through optimized preprocessing and data augmentation.
- Led cross-functional teams to meet project milestones and achieve key performance metrics for AI-driven solutions.

PROJECTS

Diabetic Retinopathy - Github

- Built a hybrid vision transformer and CNN model achieving 95% accuracy for early diagnosis of diabetic retinopathy.
- Deployed the model using AWS SageMaker with GPU acceleration, reducing inference time by 25% and ensuring scalability for real-time predictions.
- Utilized CUDA for optimizing kernel operations, enhancing robustness and computational efficiency across diverse datasets.

GitHub Issue Forecasting for Project Management Optimization - Github

- Designed a forecasting system predicting GitHub issue trends, enhancing project efficiency by 15% and reducing time spent on critical issues by 25%.
- Deployed on Google Cloud to enable real-time predictions, increasing issue resolution speed by 30% and improving team productivity.

Riptidee:

- Built predictive models for marketing analytics using NLP techniques to analyze customer sentiment and behavior.
- Increased customer acquisition by 40% and improved revenue by 20% within three months by providing actionable insights through data visualization dashboards.
- Implemented MongoDB to improve data storage and retrieval, allowing the system to handle a 40% increase in users and reducing delays by 25% during high data usage times.

LEADERSHIP EXPERIENCE

Technical Head Oct 2021 – May 2023
HackClub SVIT
Led a student-run club focused on technical skill development through workshops and hackathons. Key contributions:

- HackSVIT: Led a 36-hour hackathon with 400+ participants nationwide. Oversaw logistics, registrations, and a team of 35 volunteers.
- MECIA Hacks: Mentored 300 participants during a 24-hour ideation hackathon, providing technical guidance and feedback.
- Vision XI: Organized a series of technical events and workshops, led 12 members and engaged 50-75 participants in various activities.
- Achieved a 40% growth in club membership through strategic outreach initiatives, significantly enhancing the club's presence and impact within the university.

EDUCATION

Illinois Institute of Technology, Chicago, IL May 2025
Master of Science, Computer Science, GPA 3.77/4
Key Courses: NLP, Machine Learning, Big Data, Design & Analysis of Algorithms, Software Development, Deep Learning

Gujarat Technological University, India May 2023
Bachelor of Engineering, Computer Engineering, GPA 3.76 /4
Key Courses: Artificial Intelligence, Cloud Computing, Computer Vision, Data Science, Operating Systems, Cloud Computing