Prashant Gavit

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Summary

Data Scientist and **ML Engineer** with **7+ years** of experience in U.S. **healthcare** and **logistics**, specializing in **machine learning**, **deep learning**, **NLP**, and **statistical modeling**. Proven track record of delivering scalable **AI/ML solutions** and driving impact through **advanced analytics**, including **recommender systems** and patient **risk stratification** tools.

Education

- **San Jose State University** *San Jose, USA*
  M.S. Artificial Intelligence - GPA 3.75/4 *Jan 2024 - Dec 2025*
  Relevant Coursework: AI & Data Engineering, Machine Learning, Reinforcement Learning, NLP, Recommendation Systems, Data Structures & Algorithms, DBMS, Operating Systems
- **Indian Institute of Technology, Madras (IIT Madras)** *Chennai, India*
  BTech and MTech - GPA 3.4/4 *August 2011 - May 2016*

Experience

- **Innovaccer | Data Science Intern | San Francisco, USA** *February 2025 - Current*
  - Built an evaluation framework to assess **clinical decision-making** of **LLM agents** using real-world patient data, reducing benchmarking time by **80%**.
  - Developed an **LLM multi-agent system** to automate **clinical text mapping**, reducing data ingestion time by **50%**.
- **Blackbuck | Senior Data Scientist | Bengaluru, India** *April 2022 - July 2023*
  - Designed a **multi-objective recommendation system** using **contextual multi-armed bandits**, optimizing for diversity, relevance, and novelty, while maintaining NDCG and reducing A/B testing time by 30%.
  - Implemented a real-time GPS anomaly detection system using a **Dynamic Kalman filter**, achieving 95% noise detection with only 0.1% false positives, leading to an 18% increase in active users.
  - Built a semantic representation of product entities using a **GloVe model** and incorporated these semantics as recommendation model features, improving the NDCG metric of the recommendation system by 13%.
  - Engineered scalable data pipelines with **SQL**, **AWS Athena**, **S3**, and **Apache Airflow**, and deployed models using **SageMaker** and **MLflow**, reducing deployment time by 80%.
- **Innova Solution | Tech Lead | Chennai, India** *Sep 2021 - March 2022*
  - Built a centralized **data lake** for de-identified U.S. healthcare data using **AWS Athena**, **Lake Formation**, and **data mesh architecture**, increasing platform adoption by **31%** across DS and BI teams.
  - Integrated the data lake with **SageMaker**, **Superset**, **Power BI**, and **Tableau**, reducing ML and analytics model delivery time by **38%** and enabling rapid prototyping of models and dashboards.
- **Innovaccer | Senior Data Scientist | Noida, India** *June 2016 - August 2021*
  - Led a team of data scientists to deliver **Patient Identity** and **Risk Management** solutions, contributing nearly **$10 million** in Annual Recurring Revenue (ARR).
  - Developed an **AWS Lambda**-based serverless framework to streamline the development and productionization of analytical algorithms, reducing deployment time and operational overhead by **60%**.
  - Built a **social vulnerability index** using **PCA** and **Google Maps data**, improving patient prioritization and increasing adoption of the risk stratification solution by **40%**.
  - Trained a **bi-directional LSTM model** on longitudinal **EHR data** to predict **chronic disease onset**, achieving an **AUC-ROC of 0.85** and reducing cost of care by **12%**.

Academic & Research Projects

- **Enhancing Meta-learner by Adaptive Task Generation** *January 2025 - Current*
  - Designed an adaptive task generator using a **Variational Autoencoder** to enhance meta-learning performance in **few-shot classification** scenarios. Achieved **1–2%** accuracy improvement over standard uniform task sampling on the **Omniglot dataset**. Advisor: **Professor Magdalini Eirinaki**.
- **Classification Explainability Analysis on LLaMA Models - Git** *June 2024 - August 2024*
  - Integrated the **' Explaining by Removing'** framework with the HuggingFace **LLaMA 3 8B** model to improve interpretability in COVID-19 **fake news classification**. Evaluated the model's explanation fidelity across input token removal strategies. Advisor: **Professor Vishnu S. Pendyala**.

Skills

- **Languages:** Python, C, C++, R, MATLAB, SQL, Scala
- **ML Frameworks & Tools:** PyTorch, TensorFlow, scikit-learn, NumPy
- **Big Data & Cloud:** AWS (Athena, SageMaker, S3, Lake Formation), GCP, Azure, Hadoop, Spark
- **Deployment & DevOps:** Docker, Git, Apache Airflow, CI/CD, FastAPI, Kubernetes, MLflow