ABHITAY SHINDE

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EDUCATION

Columbia University   **New York, NY**
M.S. Data Science - GPA: 3.7/4.0   Sep 2024 - Dec 2025
- **Relevant Courses:** Agentic AI, Fintech, and Data Economy (PhD elective), Big Data Analytics, Applied Machine Learning.

NMIMS University   **Mumbai, India**
B.Tech Honors in Computer Engineering and Data Science/Analytics - GPA: 3.9/4.0   Jun 2020 - May 2024

PROFESSIONAL EXPERIENCE

Julius Baer   **New York, NY**
Data Science Researcher (Gen AI and Personalization)   Jun 2025 - Sept 2025
- Performed causal and exploratory analysis on customer engagement and market data, driving a 25% lift in content engagement.
- Developed LangGraph and Vertex AI personalization chatbot, automated content selection and cut down curation time by 35%.
- Established an experimentation metrics framework, enhancing A/B test accuracy, guardrails, and reproducibility across teams.

TD Bank   **New York, NY**
Data Scientist Apprentice (Customer Analytics and Segmentation)   Jan 2025 - May 2025
- Executed causal inference and A/B testing to evaluate fraud-detection strategies on 100M+ transactions, strengthening decisions.
- Engineered XGBoost in Spark for credit scoring, raising PR-AUC from 0.20 to 0.67 (235%) and explainability via SHAP.
- Collaborated with senior management and risk teams to inform segmentation, fraud reduction, and credit strategy decisions.

Ask2AI   **New York, NY**
Quantitative Research Apprentice (Acquisition Analytics and Growth Optimization)   Jan 2025 - May 2025
- Implemented uplift modeling and experimentation to isolate causal impact on acquisition, improving ROI attribution by 22%.
- Constructed regression and MILP optimization models for acquisition allocation and raised customer lifetime value by 12%.
- Delivered forecasting-driven insights to guide growth strategy, increasing acquisition rates and decreasing churn by 25%.

Columbia University   **New York, NY**
Teaching Assistant - Algorithms to Data Science (Academics)   September 2024 - Jan 2025
- Mentored 250+ MS students, bridging ML algorithms with product-focused analytical reasoning and experiment frameworks.
- Designed case studies and assignments emphasizing causal inference, A/B test design, and data-driven decision-making.

Navin Fluorine International Limited   **Mumbai, India**
Data Scientist (Predictive Maintenance and Operational Analytics)   May 2023 - Nov 2023
- Built predictive maintenance models reducing downtime cost by 35% and automated KPI pipelines cutting latency by 40%.
- Deployed anomaly-detection systems to surface high-risk events earlier, improving recall by 15% and reducing disruptions.

E-Revbay Pvt. Ltd.   **Mumbai, India**
Founding IT Intern (Acquisition and Retention Analytics)   Dec 2021 - May 2022
- Constructed a customer acquisition prediction model using Equifax data, improving target campaign precision by 50%.
- Automated dashboards and root-cause pipelines, reducing intervention time by 25% and improving cross-team response speed.

LEADERSHIP EXPERIENCE

- Founding team member for analytics products: MyLoanBhai, TestMyPolicy, FinQy 2.0, driving impactful innovation.
- Scaled core product operations across 35 cities and 3 countries, supporting sustained customer retention growth.
- Lead author on 4+ peer-reviewed research papers across predictive maintenance, NLP automation, and risk modeling.
- Winner, global AI hackathon (1,311 participants, 19 countries; 1st out of 750 teams), achieving international recognition.

PUBLICATIONS

- **Semi-Supervised Risk Modeling (IEEE '25):** ML framework combining structured and unstructured data frameworks.
- **High-Recall Event Detection (IEEE '23):** Lead Author; Achieved 0.92 recall through highly optimized XGBoost pipelines.
- **Predictive Maintenance (IEEE '23):** Lead Author; Time series models for proactive fault forecasting with 87.8% accuracy.
- **Natural Language SQL (IJNRD '23):** Developed an NLP system translating text to SQL queries for seamless analytics.

SKILLS

- **Machine Learning:** Regression, Ensemble Trees, LSTM, GNN, Clustering, PCA, Forecasting, Causal Inference, A/B Testing
- **Analytics & Experimentation:** EDA, Root Cause Analysis, Metric Design, Hypothesis Testing, Statistical Modeling
- **Generative AI & LLMs:** RAG, LangChain, LangGraph, Hugging Face, Vertex AI, OpenAI APIs
- **Data Engineering:** Python, SQL, Spark, Hive, Hadoop, Pandas, NumPy, Airflow, Tableau, Qlik Sense, Docker, Git
- **Cloud & Infrastructure:** AWS, GCP, Vertex AI, MLOps, Data Pipelines, Jupyter, Databricks, BigQuery, Notion, Excel
- **Collaboration & Communication:** Cross-functional Strategy, Product Experimentation, Business Impact Quantification