OM AGRAWAL

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EDUCATION

Columbia University, Columbia Engineering & Columbia Business School — New York, NY
M.S. Business Analytics, **CGPA: 3.94/4** — Expected Dec 2025
- Business Analytics Fellowship (May 2025), Professional Development Scholarship (Nov 2025)
- Courses: Business Analytics, Data Analytics, Marketing Analytics, Process Improvement and Growth, Optimization Models and Methods, Machine Leaning, Capital Markets and Investments, Marketing Consulting Skills, Managerial Negotiations; PhD level: Generative AI Technical and Social, Algorithms with Predictions
- Teaching Assistant: IEOR 4523 Data Analytics (Spring 2025, Fall 2025)

Virginia Tech, Pamplin School of Business — Blacksburg, VA
B.S. in Management-Business Information Technology, Major: Cybersecurity Management and Analytics, **CGPA: 3.96/4** — Aug 2020-May 2024
- Dean's List: Fall 2023, Spring 2024; Honors Laurate Diploma (May 2024)
- Courses: Corporate Finance, Strategic Management, Cyber Analytics, Data Governance, Business & Cyber Law
- Grader: MATH 1524 Business Calculus (Fall 2023 & Spring 2024)

NMIMS University, School of Engineering — Mumbai, India
B. Tech Computer Science and Engineering (Data Science), **CGPA: 3.90/4** — Aug 2020-May 2024
- Certificate of Merit and Gold Medal Rank 1 (Aug 2024)
- Founder & President Analytika (Data Science Club), VP Innovation Club
- Courses: DBMS, Analysis of Algorithms, ML, AI, ETL, Image Processing, Marketing, Finance, Operations, Supply Chain, Accounting, Strategic Management

SKILLS

Languages: Python, R, SQL, C++, Java, MATLAB, Stata, LLMs and GenAI
Data Science Libraries: pandas, TensorFlow, statsmodels, scikit-learn, Pytorch, PyMuPDF
Visualization, Web / DB: Plotly, Seaborn, PowerBI, Tableau; Flask, MySQL, Git
AI & Machine Learning: NLP, OpenCV, Hugging Face, OpenAI, LlamaIndex, Langchain
Leadership: Strategic & systems thinking, project management, agile execution, creative change leadership, entrepreneurial mindset, data-driven decision-making, continuous improvement (six sigma black belt), stakeholder alignment, and cross-functional team leadership

PROFESSIONAL EXPERIENCE

Tata Consultancy Services, North America: ***GenAI Go-To Market strategy development for BFSI North America*** — New York, NY
Tata Global Intern at East Coast Banking Unit — June 2025-Aug 2025
- Assessed facilitators and barriers with 18 client partners on why GenAI solutions stall pre-production and then developed a strategic roadmap
- Conducted external/internal landscape analysis across 3 regions and 20+ client journeys; delivered prioritized recommendations to leadership

Virginia Tech — Blacksburg, VA
Research Assistant and Data Scientist at Allen Labs (https://news.vt.edu/articles/2024/11/science-xprize-winner.html) — Jan 2024-June 2024
XPRIZE Rainforest: Selected and WON a $10 million competition funded by the Elon Musk Foundation to quantify value of Amazon forests, Brazil
- Implemented and fine-tuned a frog call classification model, achieving 92% accuracy based on a published study
- Performed ETL process on largest global repository of bird data; developed an insect identification model, speeding image analysis by 30%

HDFC Life Ltd. — Mumbai, India
Data Science Intern at Data Labs — May 2023-July 2023
- Upgraded InstA bot with LLM features, improving FLS info access by 20% and co-developed GenAI assisted digital training module with HR
- Automated customer profiling with underwriters (making it 50% faster), reducing dropout rate by 15%

KPIT Technologies Ltd. — Mumbai, India
Data Science Trainee — Apr 2022-July 2022
- Designed a model across 10 cycles with 87% accuracy on log data with 50 parameters to predict auto engine failure
- Performed Survival Analysis & prediction of Remaining Useful Life using 10+ models including Kaplan-Meier Estimator & Weibull AFT

SELECTED PROJECTS & RESEARCH EXPERIENCE

COMPLIANTAGI: Benchmarking Real-World Compliance Risk and Deployable Intelligence with Schema-Gated Evaluation (2025)
- Designed a first-of-its-kind benchmark to evaluate 20+ LLM agents' legal, ethical, and audit-ready behavior across 3 domains finance, healthcare, and public-sector workflows; implemented schema-gated validation, risk-weighted scoring, and reproducible JSONL audit logs to quantify deployment and compliance performance

Learning-Augmented Scheduling: Load balancing for Makespan Minimization for Online Related Machines with Predictions (2025)
- Formulated a novel algorithmic framework for online makespan minimization using predictive insights; analyzed competitive-ratio to near 1-OPT guarantees and robustness consistency trade-offs, extending the theory of learning-augmented algorithms for non-clairvoyant scheduling

AcadiaData: LLM-Powered RAG Pipeline for Strategic Company Analysis (2025) – Columbia Engineering Capstone
- Engineered a Retrieval-Augmented Generation (RAG) pipeline leveraging LLMs including OpenAI, Gemini, and Hugging Face models to convert unstructured SEC (Securities and Exchange Commission) filings achieving 85% accuracy into reports, for strategic assessment of company capabilities and competitive differentials

Lost & Found Props, Brooklyn Navy Yard – Operational Process Optimization (Spring 2025) – Columbia Business School
- Spearheaded an operational excellence revamp at L&F Props by designing a centralized workflow and inventory tracking system, reducing misplaced items by 97% and improving delivery turnaround by 30% by employing Lean Six-Sigma and Deming principles

Calculating the Value of Time: Predictive Analytics for Luxury Watch Auctions (2024)
- Developed an end-to-end predictive analytics pipeline for predicting watch price, by scraping and modeling Sotheby's historic watch auction data, achieving 92% accuracy with neural networks and an R^2 of 0.80 using interpretable models across 20+ features including brand, year, and provenance

The Pivot Summation Method: A Geometric Reimagination of Simple Linear Regression
- Presented at INFORMS Annual Meeting 2025 (Atlanta, Georgia). This paper investigates a simpler mathematical method for approximation of Linear Regression