


# HARSH VERMA

✉ hverma4@pride.hofstra.edu    linkedin.com/in/veharsh    vermahash.github.io    github.com/Vermahash   🏠 New York, USA

## PROFESSIONAL SUMMARY

Data professional with 3 years' experience at Deloitte and Optimum (Altice USA) turning data into actionable insights for Fortune 500 clients. Skilled in predictive modeling, dashboards, and automated ETL that cut reporting time by 70% and reduce errors by 30%. Strong Python/SQL/ML expertise with a track record of enabling C-suite strategies and measurable ROI.

## EXPERIENCE

### Optimum (Altice USA)

Feb 2025 – May 2025

*Data Analytics, Strategic Program Office*

*Long Island City, NY*

- Built workforce performance dashboards in Power BI with SQL/Python ETL, cutting reporting time 70% and giving executives real-time visibility into attrition, resource allocation, and productivity trends.
- Designed predictive talent ROI-risk model that identified workforce performance shortfalls 8 weeks early, enabling proactive staffing decisions across 5+ business units.
- Built VBA scripts uniting FP&A and operational metrics, enabling ROI forecasts for \$20M+ in planned initiatives.
- Defined and embedded KPIs with 4+ cross-functional teams, boosting dashboard adoption 60% in the first month.
- Implemented automated refresh/validation in Power BI, reducing manual errors 90% and increasing trust in reporting.

### Deloitte (Offices of the US)

May 2021 – Aug 2023

*Data Analyst (Workday Practice)*

*India*

- Migrated 1M+ employee records into Workday with 98% accuracy, strengthening HR data integrity across recruiting, compensation, and performance systems for Fortune 500 clients.
- Automated ETL workflows with 100+ SQL scripts, cutting processing time by 40% & data mismatches(received vs intended) by 25%.
- Served as SME for client data resolution, deploying error-detection scripts that cut support tickets & reduced data error rates by 30%.
- Created monitoring dashboards to improve defect tracking and reduce manual effort by 50%.
- Led team onboarding efforts by launching an internal knowledge-sharing hub for data processes.

## PROJECTS

### NLP Automation & Summarization

- **News Scraping & Summarization (Python, Selenium, Hugging Face BART, Ollama, VADER):** Built an automated pipeline to scrape NPR articles, generate on-device LLM summaries, and run sentiment analysis; cut article review time 80% and adopted in coursework.
- **Retrieval Augmented Chatbot (LLaMA 3, LangChain, Flask, sentence-transformers):** Built fully offline chatbot retrieving answers from PDFs in <1 sec eliminated API costs and used by peers as an interactive study buddy.

### Advanced Machine Learning & Analytics

- **Ensemble & Unsupervised Learning Analysis (Nov 2024–Dec 2024):** Applied PCA & UMAP to reduce dimensions on Tortuga user-engagement and Wine Quality chemical datasets (silhouette = 0.99), then used GridSearchCV-tuned Random Forest & AdaBoost to uncover distinct behavior segments and surfacing hidden patterns for churn profiling and recommendation use cases.
- **Insurance Premium Estimator(MLOps)(June 2025–July 2025)** Web App Training a regression model ( $R^2=0.75$ ) on health data deployed via a Streamlit UI with a FastAPI backend for real-time premium predictions, packaged using Docker for

### Data Visualization & Foundational Analytics

- **U.S. Police Shootings Analysis (Nov 2024–Dec 2024):** Created interactive Tableau dashboards to visualize nationwide trends, demographics, and geographic patterns with data storytelling, used in class to support discussions on safety and policy

## TECHNICAL SKILLS

**Core Competencies:** Data Analysis, Predictive Modeling, Machine Learning (Ensemble, Unsupervised), Stakeholder Engagement

**Programming & Tools:** Python, SQL, R, Git, Jupyter, VS Code

**Libraries & Frameworks:** Pandas, NumPy, Scikit-learn, NLTK, LangChain, sentence-transformers, Neuralnet (R)

**Visualization & Reporting:** Tableau, Power BI, Data Storytelling, Advanced Dashboarding

**Cloud & Deployment:** AWS (Lambda, EC2, S3), API Development, Docker, Kubernetes, Streamlit, FastAPI

**Databases:** MySQL, PostgreSQL, DynamoDB, SQLAlchemy, Alembic, Workday, Pinecone, Pydantic

## EDUCATION

### Hofstra University, Zarb School of Business

Jan 2024 – May 2025

*M.S. in Business Analytics*

*Hempstead, NY*

Authorized to work in the U.S. under OPT & STEM OPT visa (expires May 2028)

### Manipal University

Aug 2016 – May 2020

*Bachelors of Technology in Computer Communication Engineering*

*Jaipur, India*