VARNIKA KALANI

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EDUCATION

Boston University: College of Arts and Sciences; Boston, MA

Bachelor of Arts in Data Science with Minor in Business and Administration

Dec 2025

Relevant Coursework: Financial Accounting, Business Decision-Making with Data, Applied Programming for Investments, Probabilistic and Statistical Decision-Making for Management, Programming for Data Science, Introduction to Product Management

WORK EXPERIENCE

Mphasis; Remote (voluntarily working from NYC office)

Jun 2025 – Aug 2025

Machine Learning Intern

Internship in progress; details to be added upon completion.

BU Finance & Investment Club; Boston, MA

Feb 2025 - Present

Ouantitative Senior

- Collaborating on a semester-long quantitative research project focused on Kalshi prediction markets and automated trading pipelines.
- Built a scheduled Azure Function pipeline to collect daily SPY/SPX data using Kalshi API, with logs and cloud storage integration.
- Applied Python testing (pytest), typing (Pydantic), and engineering best practices. Working toward Docker/Kubernetes deployment.

Girls Who Code; Boston, MA

Sep 2024 – Dec 2024

Mentorship Program Facilitator

- Served as a Bits Facilitator in the Bits & Bytes Mentorship Program, a Girls Who Code BU initiative.
- Conducted weekly virtual coding workshops for grades 3-5, teaching Python, Scratch, and foundational computer science principles.

Mauve; Rajasthan, India Social Media Analytics

May 2023 – June 2024

- Developed and implemented targeted ad campaigns based on demographic data and user engagement metrics, increasing social media-driven sales by 15% over a three-month period.
- Analyzed social media trends and feedback to refine marketing strategies, which enhanced brand visibility and improved customer satisfaction ratings.

World of Stones; Maryland, USA

Dec 2023 - Feb 2024

Data Analytics Intern

- Identified key performance indicators for sales and customer engagement through comprehensive exploratory data analysis, providing actionable insights that informed strategic decision-making.
- Visualized complex data sets using tools like Tableau and Python's seaborn, enhancing stakeholder understanding of underlying trends.

PROJECTS

Thurmond Amendment Advocacy Campaign

Jan 2025 - Apr 2025

- Partnered with client Yusuf Dahl to support federal advocacy for repealing the Thurmond Amendment using state-level drug conviction data.
- Cleaned and analyzed Arkansas data to uncover demographic disparities and socioeconomic effects of fair housing exclusions.
- Created visualizations and policy impact summaries for use in legislative meetings; built dashboards using Python, SQL, and Google Looker.

Diabetes Prediction Model

Oct 2024 - Dec 2024

- Built a Random Forest model to predict diabetes, prioritizing recall for accurate case detection.
- Implemented Random UnderSampling to tackle class imbalance, achieving a 73.2% recall for enhanced case detection.
- Applied dimensionality reduction (PCA) and performed hyperparameter tuning to optimize overall performance metrics.

SAAF

Dec 2022 - Dec 2023

- Developed an iOS app to address water shortages in Rajasthan, facilitating NGO distribution of testing kits.
- Designed a user-friendly interface and optimized backend performance using advanced data structures.

LEADERSHIP

NVIDIA GTC 2025 Delegate San Jose, CA

March 2025

Attended leading AI conference sessions on agentic AI, generative AI infrastructure for India, and AI-driven retail transformation. Earned certification in LLM app development and prompt engineering.

Delta Kappa Alpha, Member

Sept 2023 - Present

Led and coordinated Delta Kappa Alpha's key events, promoting collaboration and fostering a deeper appreciation of cinema among members and the broader community.

Social Impact Film Festival, Volunteer

Jan 2024 - April 2024

Coordinated logistics and programming for the Social Impact Film Festival, enhancing attendee experience and engagement through wellexecuted screenings and event.

CERTIFICATIONS

Building LLM Applications With Prompt Engineering – NVIDIA GTC 2025

Credential ID: g-2IIRd1RO6ZWcYuaAXLtA | Issued: Mar 2025

Completed a hands-on workshop led by Mohammad Ali Raza on deploying real-world LLM-powered applications using LangChain, Llama 3.1, and NVIDIA's NIM. Topics included chatbot development, document analysis, agentic AI tools, and structured output design.

Programming & Web Development: Python, Java, R. SOL, LangChain, Web Development | Data & Analytics Tools: Power Bl, Tableau, Google Looker | Cloud & DevOps: Kubernetes, Docker | Design & Productivity: Canva, Adobe Photoshop, Microsoft Office, G-Suite | Version Control: Git