Anusha Bhat

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SUMMARY

Data Scientist with 3 years of experience in data collection, visualization, statistical analysis, & machine learning. Skilled in Python, R, Tableau, & cloud computing for data-driven insights & solutions. Strong background in both academic research & industry applications. Adept at translating complex data into actionable business strategies.

EDUCATION

M.S. in Applied Data Science | **University of Chicago** | Chicago, IL   **Expected Dec. 2025**
Relevant Coursework: Big Data & Cloud Computing, Machine Learning, Algorithmic Marketing, Time Series Analysis, Leadership & Consulting, Python & R for Data Science, Linear Algebra for ML, Statistical Models.

B.S. in Statistics & Machine Learning | **Carnegie Mellon University** | Pittsburgh, PA   **May 2024**
Awards: University Honors, College of Science Honors, Biology Honors, Senior Leadership Recognition, NuRhoPsi Honor Society Member
Relevant Coursework: Machine Learning, Regression, Advanced Data Analysis, Data Structures & Algorithms, Statistical Computing, Statistical Visualization, Text Analysis, Designing AI Products, Statistical Inference, Multivariate Analysis; Minor in Biological Sciences.

TECHNICAL SKILLS

Programming Languages: R, Python, C, SQL
Data Science: NLP, Machine Learning (NumPy, Pandas, Scikit-Learn, PySpark), Graph Computing, Cloud Computing (GCS, AWS S3), Time Series Analysis, Data Collection, & Visualization, Tableau, Algorithmic Design, & UX/UI Principles.

PROFESSIONAL & CLIENT EXPERIENCE

Software Engineering Intern | **Material Bank |** Boca Raton, FL   **June 2024 – July 2024**
- Analyzed 6 months of consumer data in R to gain insight into product preferences, delivery regions, & product specifications across different projects, informing targeted marketing strategies.
- Developed a graph-based database tool in Neo4j for efficient data queries & visualizations, significantly improving data accessibility & decision-making for the business & marketing teams.
- Presented insights & tool functionality in a 90-minute presentation to senior leadership, supporting strategic initiatives.

Business Analytics & AI/ML Intern | **SENS Psychology** | Washington D.C.   **Jan. 2024 – Mar. 2024**
- Developed & executed targeted SEO strategies to increase website & social media traffic, improving online visibility for the clinic.
- Initiated the development of a mobile app to create a virtual conversation coach for couples counseling.

US Artistic Gymnastics Olympics Team Simulation | **CMU Statistics Capstone** | Pittsburgh, PA   **Aug. 2023 – Jan. 2024**
- Developed a Python simulation to model the Olympic gymnastics competition, using linear mixed effects regression, to forecast the weighted medal counts for the US team.
- Partnered with clients to analyze data & identify the top-performing US gymnasts for the Paris 2024 Olympics, delivering actionable insights through weekly meetings, detailed reports, presentations, & a final poster.
- Achieved accurate predictions for 4 out of 5 male team members & event medals for both the male & female gymnasts.

ACADEMIC PROJECTS

Market Segmentation & Recommendation | Algorithmic Marketing   **Winter 2025**
- Identified product associations with market basket analysis & clustered customers for segmentation to tailor promotional strategies.
- Developed a recommender system in Python to suggest relevant products based on transactional patterns from similar households.

Predicting IBM Employee Attrition | Machine Learning I   **Winter 2025**
- Segmented employees using K-prototypes clustering & predicted attrition with logistic regression, XGBoost, & RandomForest.
- Performed cluster-wise regression, utilized SMOTE, & compared model performances, driving more targeted retention strategies.

Expedia Flight Itinerary Analysis | Big Data & Cloud Computing   **Fall 2024**
- Cleaned a large dataset using GCS & PySpark, applying ETL strategies (feature engineering & imputation) for data preparation.
- Designed a graph model for US flight routes, using shortest paths, motif finding, & PageRank to answer customer queries.
- Developed & compared predictive models (linear models, gradient boosting trees, SARIMA) to forecast flight fare prices.

Comparison of Beyonce's & Taylor Swift's Lyrics | Text Analysis   **Fall 2023**
- Collected & curated a comprehensive text corpus by compiling song lyrics from Beyoncé & Taylor Swift.
- Applied NLP techniques in R, including topic modeling, stemming, regression analysis, & multidimensional, principal component, & keyword analysis in R to examine token usage, key themes, & recurring patterns in both artists' lyrics.

RESEARCH EXPERIENCE

Undergraduate Researcher | **Dept. of Hematology, Hilman Cancer Center** | Pittsburgh, PA   **Jan. 2022 – May 2024**
- Designed & conducted experiments to study tetraspanin protein interactions, utilizing Excel to analyze & visualize data.
- Presented data-driven findings to technical and non-technical audiences through a poster, thesis, and oral defense.

Research Intern | **Dept. of Biochemistry, Univ. of MD** | Baltimore, MD   **May 2021 – Aug. 2021, May 2022 – Aug. 2022**
- Led research investigating the role of S100B protein in melanoma metastasis, designing & executing end-to-end experiments from data collection to analysis.
- Processed migration assay images with ImageJ and GraphPad to quantify cell migration and extract insights from complex datasets.