

ANUSHAY ANJUM

New York, NY

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EXPERIENCE

Data Science and Machine Learning Intern, Microsoft, Redmond, WA

Summer 2026

- Served as a cross-functional product manager, data scientist, and engineer for team's Surface MCP Server, owning adoption and reliability work from telemetry instrumentation and product requirements through analysis, dashboard development, and stakeholder execution.
- Built an adoption and reliability dashboard using Kusto (KQL) and Power BI, tracking active devices, launch-to-tool conversion, completion and success rates, P50/P95 latency, failures, and app-version adoption; added in-app missions to improve onboarding, activation, and self-host engagement.
- Audited and fixed telemetry across battery, device, keyboard, and pen tools, uncovering naming mismatches, missing parameters, and misleading success signals; partnered with engineers and PMs to define canonical events, implement tool-specific metrics, and improve data reliability.

Data Science and Machine Learning Intern, Microsoft, Redmond, WA

Summer 2025

- Built a machine learning battery-life forecasting model for Surface devices (replacing a 35-year-old legacy model) using Python (Pandas, NumPy) and Kusto (KQL) on 10M+ telemetry rows; engineered 75+ features, developed a novel time-series calculation method, and cut error from 22% to under 10% MAPE. Tuned 500+ LightGBM models with time-series CV, reducing RMSE gap by 30% and achieving 75%+ negative-bias reliability.
- Productionized predictive pipelines via Microsoft's MLOps CI/CD with automated retrains, monitoring, and rollback-safe deployments; created a post-production buffer calibration layer to improve reliability.
- Mentored underrepresented students through Black@Microsoft ERG, teaching data science/ML fundamentals to expand STEM access.

Data Science Intern, University of California San Francisco, San Francisco, CA

Summer 2024

- Conducted advanced data analysis leveraging Python (Pandas, NumPy) and R (Seurat), focusing on single-cell RNAseq, lineage tracing, and CNV analysis.
- Applied machine learning techniques, including supervised learning, unsupervised learning, and deep learning, to uncover novel insights.
- Utilized data preprocessing, feature engineering, and dimensionality reduction techniques such as PCA and t-SNE, enhancing model performance by 25%.

Software Engineering Apprentice, Accenture, New York, NY

Spring/Summer 2024

- Innovated in Spatial Computing/Extended Reality (XR) using Unity3D and C#, integrating deep neural networks with PyTorch to revolutionize user experiences across AR, VR, and MR realms, tailored to meet the needs of customer-centric stakeholders.
- Developed and presented a VR-based healthcare solution utilizing Oculus SDK and RESTful APIs to senior Accenture software engineering executives. The proposal created immersive virtual clinic environments, reduced geographical barriers by 60%, and integrated with EHR systems and telehealth platforms.

Software Engineering (ML/DS) Research Assistant, Fox Lab, New York University, NY

Spring 2024

- Engaged in Data Science and Neuroanalytics research under the supervision of Dr. Pascal Wallisch, analyzing data from over 1,200 participants.
- Worked on an interdisciplinary study on trauma-aggression reciprocity, employing VADER sentiment analysis and machine learning on over 500 hours of college student audio recordings to uncover mechanistic pathways.

Software Engineering and Data Analysis Intern, University of California Davis, Davis, CA

Fall 2023

- Developed a predictive model using Python (scikit-learn, Pandas) by analyzing cognitive data and food-choice histories from 500 geriatric rhesus macaque monkeys.
- Forecasted food choices with 80% accuracy, enhancing understanding of primate nutritional decision-making processes.

ML Researcher, American College of Cardiology, New York, NY

Fall 2023

- Implemented a Random Forest Classifier in Python to analyze over 10,000 cardiovascular patient records, enhancing the speed and precision of heart-disease diagnosis by 30%.

Data Science Intern, National Center of Adaptive Neurotechnology, Albany, NY

Summer 2023

- Conducted data analysis using R (dplyr, ggplot2), SQL (PostgreSQL), and Python (Pandas, Matplotlib), contributing to research on neurological conditions and technologies.
- Collaborated on experimental design, data collection, and analysis across neurorobotics, prosthetics, BCIs, EEG, ECoG, and EMG, processing datasets exceeding 500GB.

LEADERSHIP ACTIVITIES

Mentoring Corps, Girls Who Code

- Collaborated with a team of five to mentor over 50 young girls in tech.
- Facilitated hybrid sessions, combining in-person and virtual learning to adapt to diverse needs and maximize engagement.

Computer Science Facilitator, Pioneer Academics

- Mentored over 100 high school students in technology-based research projects, guiding them through the process of inquiry.

PUBLICATIONS AND PROJECTS

Published Research Paper - Dissociating Social and Socio-Economic Status through Music Listening Patterns

- Conducted advanced data analysis using independent-samples t-tests, KS tests, simple linear regression, Pearson correlation, and latent class analysis.
- Led the literature review team, synthesizing academic sources to support the study's framework and analysis, contributing to publication in Integrative Psychology Review.

SKILLS

Programming Languages: Python (Pandas, NumPy, PyTorch, TensorFlow, Flask), SQL, R, Java, JavaScript (React, D3.js, Node.js), CSS, HTML, C#

Tools and Frameworks: MATLAB, Tableau, Molecular Operating Environment (MOE), Notion, Git/GitHub, Figma, Wix, Piskel, MongoDB, Power BI, Kusto (KQL)

Skills: Software Development, Data Analysis, Modeling and Visualization, User-Centric Design, Leadership and Team Management, Effective Communication, Problem-Solving and Critical Thinking, Academic Research, Project Management, Agile Methodologies, Object-Oriented Programming, Debugging and Code Review

EDUCATION

New York University, College of Arts and Science, New York, NY

Bachelor's in Computer Science (major), Data Science, Mathematics (minors)

Presidential Honors Scholar | Julius Silver Scholar | Research+ Scholar

December 2026