# **Emily Cheng**

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#### **EDUCATION**

## University of Maryland (UMD)

May 2026

B.S. Mathematics: Statistics and B.S. Computer Science, Minor in General Business

GPA: 3.81

Relevant Courses: Data Science, Data Structures, Algorithms, Databases, Object-Oriented Programming, Probability and Statistics

# **TECHNICAL SKILLS**

Languages: Java, Python (Pandas, Plotly, Numpy), SQL, SAS, C++, HTML/CSS

Developer Tools: AWS (CloudWatch, Lambda, S3, Redshift), Power BI, PySpark, Tableau, Dataiku, Terraform, Jira

#### **EXPERIENCE**

Johnson & Johnson May 2025 - present

Data Science Intern

Titusville, NJ

- Enhanced Demand IQ, a Dataiku-based forecasting tool with Power BI dashboard, to predict healthcare product demand across 3 wholesalers and 100+ distribution centers
- Developed distribution center-level forecasting models by clustering service areas and analyzing local demand patterns, improving forecast accuracy by up to 40% over national models and enabling more precise inventory planning
- Collaborated with business stakeholders to gather cross-functional feedback and requirements for iterative development
- Presented distribution center modeling approach, methodology, and findings to business stakeholders, translating technical methodology into non-technical language
- Built a neural network and custom Python node class to model supply chain flows and analyze granular demand patterns

RISE Lab at UMD

Aug. 2023 - present

Research Assistant

College Park, MD

- Developed statistical models in MATLAB to analyze the distribution of hurricane characteristics (e.g., heading angle, wind speed, pressure) and their influence on landfall trajectories
- Presented findings at UMD Research Symposium, earning 3rd place for Best Presentation among 50+ student projects

MassMutual May 2024 - Aug. 2024

Actuarial Intern

Springfield, MA

- Created a SQL- and Excel-based analysis tool to evaluate long-term care offramp criteria, integrating data from Alation and building reusable frameworks for actuarial insights
- Presented data insights and technical documentation to over 75 actuaries in the company, translating complex analysis into actionable strategies

Ticketmaster January 2024

Software Engineer Intern

Reston, VA

- Developed an automated monitoring system to detect Typeform survey exceptions used across 400+ entertainment venues in North America
- Built AWS Lambda functions in Python to process DLQ (dead-letter queue) messages, identify failures, and send real-time alerts to Slack, reducing issue response time
- Collaborated on an Agile team using the SAFe framework, participating in daily stand-ups and managing tasks in Jira
- Supported infrastructure deployment using Terraform and configured CI/CD workflows with GitLab CI YAML

### **PROJECTS**

# NLP-Based Statement Classification | Python (Pandas, Scikit-learn, Numpy)

- Built and evaluated multi-class classification models (Logistic Regression, Random Forest, LightGBM) in Python to predict political statement reliability, achieving 79.7% accuracy with LightGBM
- Performed end-to-end pipeline development including data cleaning, feature engineering (TF-IDF, OneHotEncoder, MultiLabelBinarizer), and dimensionality reduction (TruncatedSVD)

## Netflix Dashboard | Tableau

• Developed an interactive dashboard to explore content consumption trends across genres and regions, enabling user-driven insights and engagement analysis