#### SOPHIA RUTMAN

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#### **EDUCATION**

Georgetown University, Washington D.C

MS in Data Science and Analytics

December 2025

GPA: 4.0

Involvements: DataKind DC, Athletic Events Operations Aid, Graduate Teaching Assistant for Digital Storytelling

Relevant Coursework: Data Science and Analytics; Probabilistic Modeling and Statistical Computing; Database Systems and SQL; Neural Networks and Deep Learning; Big Data and Cloud Computing (Fall 2025); Machine Learning App Deployment (Fall 2025)

Bowdoin College, Brunswick, ME

May 2024

GPA: 3.796

BA in Computer Science and Physics

Involvements: Varsity Field Hockey (Captain), Varsity Women's Lacrosse (Goalie), Sports Information Aid

**Relevant coursework**: Artificial Intelligence; Financial Machine Learning; Operating Systems; Software Engineering; Statistical Physics

#### EXPERIENCE

## Pacers Sports and Entertainment, Indianapolis, IN, USA

May 2025 - Present

Basketball Analytics Intern

- Aiding in the migration of 100+ data pipeline scripts from JAMS to Dagster, ensuring functionality and stability throughout the transition
- Developing a player similarity metric to compare the combined performance of trade targets and prospects to players with similar styles on the Indiana Pacers roster
- Writing SQL scripts in Databricks to evaluate whether players met performance-based contract bonus criteria using in-game and season-level data
- Future projects include front-end development for salary projection tools, predictive modeling of player peak performance, and clustering
  analysis of defensive profiles across the league

#### VolunteerMatch, Washington, DC, USA

September 2024 - February 2025

Volunteer Data Analyst

- Participated in the DataKind DC Datathon with VolunteerMatch, analyzing correlations between volunteer opportunities posted and sign-up rates across industries using Git
- Processed 72,000+ volunteer descriptions and engineered features (description length, POS tags, sentiment, keywords, n-grams) with Pandas, NumPy, Scikit-Learn, and NLTK
- · Conducting EDA to uncover insights on optimizing opportunity descriptions to boost volunteer sign-ups

### Independent Study, Bowdoin College, Brunswick, ME, USA

**August - December 2023** 

Student Researcher

- Published work under Professor Sarah Harmon utilizing data annotation relating to the effectiveness of LLMs in predicting a character's next decision in a film on over 200 pieces of data
  - Presented study (<u>Prompt Generation for Narrative Choice Generation by Sarah Harmon and Sophia Rutman</u>) in the International Conference for Interactive Storytelling in November 2023
- · Formulated a survey in a second project where users chose haptic feedback that would best fit a particular story using Amazon Mechanical Turk

#### Paramount Global - Pluto TV, Los Angelos, CA, USA

June - November 2023

Software Test Engineer Intern

- Leveraged a pre-existing code base to aid in code cleanup before deployment of a new feature on all devices
- Refactored 10 methods based on how new feature changed app navigation using Java and Selenium
- Validated functionality with Tizen, LG, and SmartCast devices using regression testing
- Created Jira tickets, my own Git branches, and 8 Pull Requests to collaborate with my team and merge code to the main branch

## Freddie Mac, McLean, VA, USA

May – August 2022

Software Development Intern

- Designed over 100 tests using Java, Selenium, and Cucumber to confirm flow of data collection applications
- · Interacted with Snowflake using SQL to confirm correct usage of database information on user interfaces
- Used Eclipse and Git/GitBash to exchange code and collaborate with team
- Collaborated in an AGILE environment within a team of five

### PART-TIME EXPERIENCE

# Athletics Department, Georgetown University, Washington, DC

August 2024 - Present

Athletic Events Operation Aid

• Collaborated with coaches and staff across 7 distinct sports to support facility operations, gaining a comprehensive understanding of sport-specific logistics, performance metrics, and data collection needs

## Sports Information, Bowdoin College, Brunswick, ME

February - May 2024

Student Worker

- · Tracked statistics, served as Public Address announcer, and controlled the possession clock during Men's and Women's Lacrosse contests
- Communicated real-time statistics to coaches for the Bowdoin Women's Basketball program in their NCAA tournament run

#### SKILLS

Coding: Python, C, C++, Java, R, SQL, HTML, CSS, JavaScript, Quarto, Jupyter, WSL, Ubuntu

Automation: Selenium. Cucumber

Collaboration: Git, Github, GitBack, Jira, Confluence, AGILE methodology Packages: Pandas, NumPy, TensorFlow, Scikit-Learn, NLTK, PyTorch Visualization: ggplot2, Matplotlib, Seaborn, Plotly, Geopandas, Altair

**Databases:** Relational Databases, NoSQL, Snowflake, Databricks, MongoDB, Azure Databricks **Data Engineering:** ETL development, pipeline orchestration with Dagster and JAMS, Data Cleaning