# **Brooke Stevens**

(404) 840-3435 | brooke.m.stevens@vanderbilt.edu | LinkedIn | GitHub Portfolio | Website

## **EDUCATION**

## Vanderbilt University

M.S. Data Science May 2026 GPA: 4.00/4.00

## Vanderbilt University

B.S. Mathematics and Engineering Science, Minors in Data Science and Business

May 2024

GPA: 3.98/4.00 | Summa Cum Laude

## PROFESSIONAL EXPERIENCE

## Microsoft

Data Science Intern

May 2025 - August 2025

- Built a logic extraction tool to convert internal IDEAS whitepapers into high-quality fine-tuning data for an AI agent
- Performed statistical hypothesis testing to show the fine-tuned agent's enhanced performance over the baseline GPT model
- Developed a reinforcement learning system using HuggingFace TRL to refine user prompts to the agent, achieving a 10% improvement in experimentation results for AI feedback optimization

## **PwC**

Data Science Intern

June 2024 - August 2024

- Built a synthetic data generator for dashboard tasks, saving engagement teams up to 2 weeks of time on data procurement
- Expanded the application's capabilities to handle complex data types and generate multiple related tables using LangChain
- Redesigned the application's user journey and front-end architecture using Streamlit

## Tennessee Department of Environment and Conservation

Data Analytics Capstone

January 2024 - April 2024

- Identified temporal, spatial, and seasonal water quality trends using 33 years of data across 86 monitoring sites in Tennessee
- Presented notable analytic insights to TDEC team once a month
- Assisted with transition to Tableau to automate analytic processes

#### **PwC**

Analytics Intern June 2023 - August 2023

- Assisted with SQL and Excel data queries to create a single source of truth for a major airline's labor analytics team
- Performed tie-outs in Excel to identify sources of variance between the client's datasets (800k+ entries)
- Built a testing progress dashboard in Excel for the finalized data source

#### Vanderbilt Data Science Club

Developer November 2022 - May 2023

- Created an email summarization and sentiment analysis tool for individuals with cognitive disabilities
- Most notable contributions included fine-tuning the sentiment analysis model and developing its <u>user interface</u>

## LEADERSHIP EXPERIENCE

## Vanderbilt Data Science Club

Vice President of Finance, Social Chair

January 2023 - May 2024

- Responsible for managing the organization's funds, leading general body meetings, and coordinating monthly social events
- Individually built new VDS online application website using GitHub Pages
- Assisted exec team with new VDS main website

## Vanderbilt Undergraduate Honor Council

Executive Board

January 2022 - December 2023

• Responsible for preparing written recordings of full panel hearings and distributing minutes from weekly board meetings

## Vanderbilt Panhellenic Conference

Recruitment Counselor

April 2022 - February 2024

• Provided individualized mentorship to 40 students during Vanderbilt's sorority recruitment process

## **SKILLS**

Python (Matplotlib, NumPy, Pandas, Scikit-Learn, Seaborn, OpenCV, PyTorch, TensorFlow, Flask, LangChain, Streamlit), R, Git/GitHub/Version Control, SQL, HTML, CSS, Microsoft Azure, Docker, Microsoft Excel, Tableau, Power BI