# Liz Rightmire

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#### **EDUCATION**

Middlebury, VT

Bachelor of Arts (Computer Science Major, Mathematics Minor)

**GPA:** 3.98/4.00

Honors/Awards: Summa Cum Laude, Distinction in Major, College Scholar

Relevant Coursework: Statistical Sciences, Statistical Learning, Data Science, Machine Learning, Randomized Algorithms for Data

Science, Artificial Intelligence, Artificial Neural Networks and Deep Learning, Healthcare in the USA

Activities/Interests: Women in Computer Science Club, Global Health Club, Middlebury EMTs, New Student Orientation Leader

#### **EXPERIENCE**

Deloitte Touche Tohmatsu Boston, MA

Data Engineer Intern

May 2024 – August 2024

- Queried attribute discrepancies, duplicates, and missing entries from Informatica master data management platform to populate a Power BI dashboard describing quality of ETL flow
- Compiled a non-structured database of source data load times, performance alerts, user activities, and resource usage to explain poor system performance; formulated actionable recommendations for database team

CVS Health Remote

Data Science Intern

May 2023 - August 2023

- Designed, tested, and improved a Keras recurrent neural network model to populate a clickable web field with the customer's predicted next search term, leading to a more efficient customer search experience and an increased search-to-purchase conversion
- Crafted the model's dataset using a SQL query to extract over 1 million search terms from July 2023; cleansed dataset using spell checker and profanity filter
- Selected with 10% of intern class to orally present model outcome to business stakeholders in CVS Health's Manhattan office; received the highest possible performance review score

## **Dartmouth Hitchcock Medical Center**

Lebanon, NH

Health Research Intern

May 2022 – August 2022

- Determined impact of immunosuppressant regimen on the COVID survival rate of organ transplant patients via auto-updating Matplotlib
  figures, Chi-Squared test, and Fisher's exact test; presented findings to medical team
- Created an Excel dataset of 1000+ patients using SQL scripts to extract and cleanse Epic medical records

## Middlebury College Quantitative Center

Middlebury, VT

Teaching Assistant

September 2022 – Present

- Host individual and group (10+ students) tutoring sessions for Math Foundations of Computing class, dissecting complicated concepts—such as Graph Theory, Proofs and Logic, Vector Geometry, and Probability—into digestible lessons
- Provide personalized feedback on weekly homework assignments for the Introduction to Data Science class

# **PROJECTS**

#### Fetal Health Prediction (blog post)

May 2024

Developed SVM and boosted random forest models to predict fetal health risk scores from incremental CTG scan data, reaching 89% and 100% accuracy, respectively.

# Skin Cancer Classification (blog post)

May 2024

- Designed, implemented, and evaluated convolutional neural network models to classify an unbalanced dataset of 10,000+ skin cancer images into 7 of the most common diagnoses at 75% accuracy.
- · Utilized data augmentation, transfer learning, and hyperparameter tuning to reduce false negative rate in malignant diagnosis categories

#### **SKILLS**

Languages: Python, SQL, R, LaTeX, Java

Tools/Frameworks: Tensorflow/Keras, Quarto, Git, Power BI, Pandas, Tableau, PyTorch, Matplotlib, Numpy