

# Hanna Hamilton

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## Experience

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### Deloitte

CONSULTANT

- Developing agentic AI tools that streamline environmental permitting for public sector clients - accelerating reviews, improving transparency, and enabling stronger climate outcomes
- Leading a cross-functional food recovery initiative, aligning internal teams and external experts to interpret food donation regulations and design a compliant and scalable food recovery system
- Supporting Deloitte's GPS Chief Data Officer by researching industry events and preparing targeted materials to enhance executive visibility and strategic engagement
- Coordinating volunteer initiatives for Deloitte's Minneapolis Green Team to support local sustainability projects
- Automated several reporting workflows by creating scripts, validating outputs, scheduling recurring data refreshes, and coordinating with the DevOps team

Remote

March 2023 - Present

### Replate

DATA SCIENTIST

Remote

January 2021 - September 2022

- Informed pricing strategy by presenting insights from a cost analysis to C-level executives and various departments
- Implemented Tableau as Replate's data visualization tool while managing a data science intern
- Designed and delivered monthly reports for 3 departments and fulfilled ad hoc data requests by extracting data from 5+ sources, assessing data quality, and building dashboards
- Automated calculations for KPIs and common data requests by building the codebase for Replate's data department
- Co-developed a matching algorithm which effectively determines food donor/recipient pairs and assigns drivers based on location, availability, and preference data for any given day and city

### Georgia Institute of Technology

GRADUATE TEACHING ASSISTANT

Remote

August 2020 - August 2021

- Supported a class of 350+ students as an assistant teacher for Regression Analysis, a graduate course in the H. Milton Stewart School of Industrial and Systems Engineering
- Led weekly office hours, created assignments and exams, graded exams, and answered questions on the online discussion board

### NCR

Remote

ANALYTICS PRACTICUM PROJECT CONSULTANT

August 2020 - November 2020

- Worked with classmates to improve and automate merchant operations for NCR with machine learning models
- Classified product catalog entries across merchants into a consistent set of groupings by implementing a similarity-based multi-step model
- Identified meaningful relationships between products by implementing the apriori algorithm and a graph convolutional network algorithm

## Skills

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**Programming** Python, SQL, R, JavaScript, MATLAB

**Techniques** Supervised and Unsupervised Learning, Variable Selection, Optimization, Statistical Analysis, Network Analysis

**Visualization** Tableau, D3.js, Matplotlib, Seaborn, Excel, MiniTab

## Education

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### Georgia Institute of Technology

Atlanta, GA

M.S. IN COMPUTATIONAL DATA ANALYTICS

December 2020

- GPA: 3.8

### University of Wisconsin-Madison

Madison, WI

B.S. IN INDUSTRIAL ENGINEERING

December 2018

- GPA: 3.4

## Professional Development

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### Climatebase

Remote

FELLOW

September 2025 - Present

- Developing a comprehensive understanding of climate solutions through an expert-led curriculum focusing on the systemic decarbonization of energy, industry, and transport, the transformation of food systems and land use, and the integration of sustainability and circularity into corporate and urban frameworks
- Leading the data modeling component of a capstone project focused on converting cold storage facilities to renewable energy and building a digital business platform to scale cold chains, creating a foundational "credit score for cooling" that unlocks financing by proving business viability to investors
- Integrating into a community of thousands of mission-driven climate professionals - including investors, founders, engineers, and policymakers - to establish a foundation for strategic collaboration and accelerate collective impact

## **Deloitte AI Academy**

Remote

### PARTICIPANT

- Completed a comprehensive nine-month course covering data foundations, AI, ethical application of AI, and applied AI in industry and business
- Gained hands-on experience applying these skills through independent capstone projects

May 2024 - January 2025

## **Academic Projects**

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### **Network Analysis for Return to Campus Decisions**

Remote

#### GEORGIA INSTITUTE OF TECHNOLOGY

- Informed Georgia Tech's return to campus decisions during the COVID-19 pandemic by analyzing student connections through courses with ISyE professors and other students
- Developed network connectivity and in-person instruction metrics to evaluate various hybrid instructional mode strategies from health and academic perspectives
- Compared these strategies in terms of network connectivity, in-person instruction, their impacts on various groups of students, and based on the trade-off between network connectivity and in-person instruction
- Co-authored "Revisiting the small-world property of co-enrollment networks: A network analysis of hybrid course delivery strategies" (Link to published article: <https://www.sciencedirect.com>)

May 2020 - May 2021

### **Predicting Airbnb Prices and Quality in New York City**

Remote

#### GEORGIA INSTITUTE OF TECHNOLOGY

- Worked with classmates to build models that predict Airbnb prices and quality in New York City
- Used random forest regression and logistic regression to build the models

March 2020 - April 2020

### **Analysis of Small Odd-Set Constraints in Maximum Weight Matching**

Remote

#### GEORGIA INSTITUTE OF TECHNOLOGY

- Implemented an optimization model for the maximum weight matching problem
- Solved the linear relaxation and explored the probability of obtaining an optimal integer solution for various numbers of vertices
- Increased the probability of obtaining an optimal integer solution by adding small odd-set constraints
- Explored and compared various approaches for reducing the computation time

March 2020 - April 2020

### **Predicting H-1B Visa Application Outcomes**

Remote

#### GEORGIA INSTITUTE OF TECHNOLOGY

- Worked with classmates to build an ensemble model that predicts the outcome of an H-1B visa application
- Combined logistic regression, support vector machines, and k-nearest neighbors to build the ensemble model

February 2020 - April 2020

### **Multi-Period Blend Scheduling Optimization**

Madison, WI

#### UNIVERSITY OF WISCONSIN-MADISON

February 2018 - December 2018

- Researched various formulations for the multi-period blend scheduling optimization problem
- Applied decomposition methods and found smaller optimality gaps than traditional solvers for mixed-integer nonlinear problems

## **Volunteer Experience**

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### **Replate**

Remote

#### DATA SCIENCE VOLUNTEER

September 2022 - Present

- Automating data processes for internal reports and recurring data requests