DREW GJERSTAD

DoD Secret Clearance | Minneapolis, MN | (

EDUCATION

University of Minnesota

2022-2026

Bachelor of Science in Data Science, Minor in Mathematics. GPA: 3.6.

Minneapolis, MN

- Honors Thesis: Combinatorial Bayesian Optimization driven by Deep Generative Models
- Awards: Iron Range Scholarship (2022 2026), Dean's List for Academic Excellence (2023 2025)
- Activities: University Honors Program, University of Minnesota Rocket Team
- PhD applications in progress; decision expected early Spring 2026.

Anoka-Ramsey Community College

2020-2022

Associate of Arts in Liberal Arts and Sciences. GPA: 3.91.

Coon Rapids, MN

EXPERIENCE

University of Minnesota, Department of Computer Science & Engineering

September 2025-

Undergraduate Teaching Assistant (CSCI 5541: Natural Language Processing)

Minneapolis, MN

- Delivering recitations on tools for prototyping, developing, and managing machine and deep learning code.
- Holding office hours to provide students with accessible support for lecture topic and coursework questions.
- Performing grading and reviewal tasks to provide timely, actionable feedback to students.

University of Minnesota, Department of Computer Science & Engineering

November 2024-

Undergraduate Researcher (Supervisor: Professor Aryan Deshwal)

Minneapolis, MN

- Research Focus: Sequential decision-making under uncertainty using Bayesian optimization and reinforcement learning to accelerate scientific discovery and engineering design in high-dimensional and mixed-variable settings.
- Designing Bayesian optimization loops in BoTorch (Python) for high-dimensional, combinatorial objectives.
- Developing Gaussian Process models in GPyTorch (Python) for modeling black-box objective functions.

Naval Surface Warfare Center, Carderock Division

May 2024-August 2024

Naval Research Enterprise Internship Program (NREIP)

Bethesda, MD

- Conducted a facility characterization test to validate the capabilities of a variable-pressure water tunnel.
- Performed a systematic review of the water tunnel's standard operating procedures, hardware, and software.
- Developed a real-time and post-processing analysis tool and UI in MATLAB for facility characterization tests.
- Prototyped data inference methods in Python and MATLAB for integration with an Oracle APEX database.

University of Minnesota Rocket Team

October 2023–May 2025

Guidance, Navigation, & Control Subteam Project Focal

Minneapolis, MN

- Led the development for the post-processing Kalman filter for state estimation, developed in MATLAB.
- Collaborated on recruitment and onboarding materials, including introductory lectures.
- Implemented the Kalman filter's control loop and data preprocessing methods in MATLAB.
- Explored validation methods to verify the Kalman filter's performance and reliability (i.e., NIS, NEES).

Optum

Data Scientist Intern

June 2023-August 2023

Minneapolis, MN

- Modeled business data in Tableau to identify opportunities to reduce issue turnaround time and issue volume.
- Built interactive dashboards in Tableau for an overview of integrations, root cause analysis, and control charts.
- Automated data governance processes in Python to verify proposed data models follow specified conventions.
- Developed an automated data quality assurance workflow in Python to validate Snowflake data lakes.

LANGUAGES & TOOLS

Languages: Python, MATLAB, R, Julia, C++, SQL, LATEX

Libraries: Matplotlib, Pandas, Scikit-Learn, TensorFlow, PyTorch, GPyTorch, BoTorch, JuMP

Tools: Git, GitHub, Docker, Tableau, Snowflake, PostgreSQL, Microsoft Excel