Danielle Williams (she/her)

Education

NORTHEASTERN UNIVERSITY, BOSTON, MA | MAY 2027

GPA: 3.9

- Candidate for Bachelor of Science Degree in Chemical Engineering and Computer Science
- Creative Coding and Civil Engineering minors

Relevant Courses: Object-Oriented Design, Algorithms and Data, Introduction to Databases, Programming
Basics/Creative Coding, Materials for the Built Environment, Energy Systems Sustainability, Environmental
Engineering, Thermodynamics 1/2, Transport Processes 1/2

Study Abroad: Student in the Textiles and Coding Dialogue of Civilization in Linz and Vienna, Austria *Awards:* University Honors Program, Dean's List (2022, 2023, 2024), Female Red & Black Dedication Award

Skills

Computer Applications: Python, Java, Java Script, C++, MATLAB, SQL, Arduino, AutoCAD, SolidWorks, GitHub *Certifications:* MS Office Specialist Word, MS Office Specialist PowerPoint, and MS Office Specialist Excel

Work Experience

POWER AND RENEWABLES CO-OP, WOOD MACKENZIE | JAN 2025—JUNE 2025

- Researched supervised, unsupervised, and machine vision-based anomaly detection models to design and tune the highest-accuracy approaches, culminating in a proof of concept presented to stakeholders for workflow optimization.
- Assisted in developing, testing, and monitoring large-scale machine learning models to enhance product performance and provide predictive insights.
- Designed and executed SQL queries to link anonymized ISO bid data with known generators, expanding data coverage and improving product comprehensiveness despite limited source information.
- Investigated customer-reported issues by analyzing backend data systems, helping ensure data integrity and supporting client trust in company services.

ENVIRONMENTAL COMPLIANCE CO-OP, UNIFIRST CORPORATION | JAN 2024—JUNE 2024

- Developed and maintained a comprehensive tracker accessible by all environmental employees to streamline data retrieval and discharge compliance monitoring for the corporation's 260 locations.
- Analyzed maintenance and wastewater lab reports to ensure regulatory compliance and identify trends, contributing to accurate permit applications and timely submissions of monthly, quarterly, and semi-annual environmental reports.
- Prepared and presented detailed reports, charts, and permit analyses for client meetings focused on improving wastewater quality.

Academic Projects

NOMNETWORK, INTRODUCTION TO DATABASES, NEU, BOSTON, MA | SUMMER 2024

- Designed entity-relationship and relational database diagrams for a data-driven application, implemented in MySQL.
- Integrated realistic data generation, REST API development, and a Streamlit UI to deliver a fully functional prototype.

COLOR QUANDARY, ARS ELECTRONICA FUTURE LAB, LINZ, AUSTRIA | SUMMER 2023

- Engineered an interactive, motion-tracked LED light installation on the Ars Electronica Center facade, enabling real-time public control and engagement.
- Collaborated with Future Lab engineers to coordinate concurrent development and testing pipelines, ensuring system stability and high-impact public presentation.

Student-Athlete

COLLEGIATE D1 VOLLEYBALL, NEU, BOSTON, MA | 2022—PRESENT

- Dedicate over 35 hours a week to Northeastern's Varsity volleyball team (including practices, lifts, individual training, film, competition, and travel); lead captain (2023—Present)
- Serve on the Student-Athlete Advisory Committee (2023—Present)