

# Merjem Memic

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## Skills

- Technical Skills in C++, Python, HTML, CSS, SQL, and R developed through both academic projects and independent study
- Proficient in Microsoft Word, Excel, and PowerPoint and Google Suite
- Excellent verbal and written communication skills curated from practice and university composition classes
- Strong analytical, statistical, and logical thinking skills from rigorous university classes in Mathematics and Computer Science

## Education

### UNIVERSITY OF MICHIGAN, ANN ARBOR, MI | BACHELOR OF SCIENCE | MAY 2025

- Major: Data Science
- GPA: 3.8
- Relevant Coursework: Introduction to Statistical Computing, Linear Algebra, Elementary Programming Concepts, Discrete Mathematics, Programming and Introduction to Data Structures, Earth Systems Analysis

## Experience

### FRONTEND DEVELOPMENT FOR SCRAPS WEBSITE | ECODATA CLUB | JAN – APR 2024

- Programmed using HTML and CSS to develop part of the interface of a recipe building website called Scraps

### HEADSTARTER AI FELLOW | JUL – SEP 2024

- Built a basic Pantry Manager Application using Firebase, Next.js, Material UI, and React to \_\_\_\_
- Programmed a Library Chatbot using the Gemini API on the backend and Next.js for the frontend.

## Academic Projects

### 2024 ASSESSING HARMFUL ALGAL BLOOMS IN LAKE ERIE (PYTHON)

- Modeled multiple data sets of algae producing nutrients collected across Lake Erie to find an increase in the severity of blooms after COVID-19
- Utilized Python libraries Numpy, matplotlib, and scikit-learn to perform statistical analysis and discovered a high correlation between nutrient content and water runoff
- Produced scatterplots, line plots, and heat maps using Python functions to visualize findings to a non-technical audience and describe the future problems facing Lake Erie
- Engaged in weekly team meetings and ensured timeliness of our progression and meeting of standards by all members

### 2024 EUCHRE INTERACTIVE CARD GAME INTERFACE (C++)

- Designed a C++ interface that allows users to play a game of euchre with simulated players executing moves via a programmed strategy through object-oriented programming
- Devised and implemented a robot opponent with intelligent strategies to compete either with other bots or with human players
- Implemented an iterative programming strategy to conserve time and prevent errors in game play

### 2022 FACTORS IN THE SEVERITY OF VEHICLE CRASHES (R)

- Modeled large data set of information on vehicle crashes which resulted in finding a daily trend in crash severity
- Used R functions to calculate the average severity of crashes for all seasons to find a pattern of more severe crashes in the winter months on while more crashes overall happened in dry months
- Communicated and reported progress routinely, which ensured it met project and individual standards before submission

## Certifications

### ACCENTURE JOB SIMULATION ON FORAGE | JUNE 2023

- Cleaned, modeled, and analyzed 7 datasets to uncover insights to inform strategic decisions using Microsoft Excel