# Elliott DuCharme

507-858-9061 | ellduc4@gmail.com | github/ellman12 | linkedin/elliott-ducharme

## Skills

Languages: C#, SQL, TypeScript, Java, C/C++, Python

Technologies: React, .NET, Next.js, Node.js, Tailwind, NUnit, Blazor, Godot, Unity

Soft Skills: Adaptable, innovative, self-motivated, tenacious

# Work Experience

# Software Engineer

Sioux Falls, SD

KBR

June 2023 - Present

- Integral member of the FEWS NET team, which uses data to assist governments worldwide with famine prediction and preparation.
- Rewrote FEWS NET website using React, Next.js, TypeScript, and Tailwind.
- Assisted with testing the website before release and helped resolve issues identified during testing.
- Demonstrated proficiency in frontend development and a commitment to leveraging technology for positive societal outcomes.
- Currently working on SWIM, an internal React app for managing employees.

### Software Design Intern

Remote

**Daktronics** 

May 2022 – May 2023

- Tested new software and hardware versions for digital signage using Azure DevOps, resolving impediments to ensure product functionality.
- Gained experience communicating issues with members of the appropriate teams when issues arose.
- Contributed to Orion, a C# web app for automating test cases years in the making.

# **Projects**

### **Memory Mosaic**

github.com/ellman12/MemoryMosaic

- A C# Blazor app for storing a lifetime of photos and videos in PostgreSQL.
- Gained extensive experience with media metadata and creating/optimizing web apps and databases.
- Libraries can scale into the millions with no performance issues.

#### WingTech Bot Mk 2

github.com/ellman12/WingTechBot

- Rewrote C# bot for private Discord server with over 40 members. Hosted on AWS EC2 with Docker.
- Implemented reaction tracking, karma, games, and additional interactive features.
- Utilized NUnit for test-driven development with extensive unit and integration tests to ensure reliability, and AWS RDS for scalable backend storage.

#### Dish Up

- Blazor app for creating, managing, and sharing cooking recipes, with a great UX on different devices.
- Led the project using Scrum. Delegated tasks, helped design UI, and helped members get tasks done.
- Validated functionality of backend with NUnit unit tests and test-driven development.

## Education

Dakota State University

Madison, SD

B.S. Computer Science, Magna Cum Laude

August 2020 - May 2023