

Elliott DuCharme

507-858-9061
ellduc4@gmail.com
elliott-ducharme
elliottduchar.me 

Skills

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

Technologies: React, .NET, Next.js, Tailwind, NUnit, Godot

Soft Skills: Adaptable, Innovative, Self-motivated, Tenacious

Work Experience

Software Engineer

KBR

Sioux Falls, SD

June 2023–Present

- Rebuilt ReactTS apps and components for global famine prediction, preparation, and management.
- Optimized map viewers, reducing page load times by 90+% and improving reliability.
- Built CI/CD pipelines with automated testing to accelerate deployment and improve code reliability.
- Enabled humanitarian organizations to make faster, data-driven decisions, directly supporting famine prevention efforts across Africa and beyond.

Software Engineer Intern

Daktronics

Remote

May 2022–May 2023

- Tested new software and hardware versions for digital signage using Azure DevOps.
- Escalated and tracked critical defects, ensuring rapid fixes and minimizing downtime.
- Implemented new features in Orion, a large-scale C# web app for test automation, increasing automated test coverage and accelerating delivery for multiple product lines.

Projects

WingTech Bot Rewrite

github.com/ellman12/WingTechBot

- Led a full rewrite of a Discord bot, migrating from C# to TypeScript using Discord.js improving API compatibility and long-term maintainability.
- Designed a modular command architecture with analytics, moderation tools, and database storage.
- Integrated an LLM-powered chatbot using Google Gemini.
- Automated builds, testing, and production deployments using CI/CD pipelines to support rapid iteration.

MemoryMosaic

github.com/ellman12/MemoryMosaic

- A 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.

Education

Dakota State University

Madison, SD

B.S. Computer Science, Magna Cum Laude

August 2020–May 2023