

Elliott DuCharme

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Education

Dakota State University, The Beacom College of Computer and Cyber Sciences
Bachelor's in Computer Science
GPA: 3.732

Madison, SD
Expected May 2023

Relevant Courses

- Object Oriented Design
- Advanced Data Structures
- Game Programming Tools
- Algorithms and Optimization
- Software Engineering
- Programming Languages
- Parallel Computing
- Foundation of Computation
- Number Theory and Cryptography
- Operating Systems
- Calculus
- Software Security
- Software Dev with Agile Methodologies
- Web App Programming II
- Networking I
- Machine Learning Fundamentals
- Intro to Statistics
- Assembly
- Discrete Math
- Operating Environments
- Intro to Physics

Skills

- Very skilled in and passionate about C# and Unity
- Experience creating UIs for web and desktop applications, and the Unity game engine
- Experience working in C, C++, Python, Java, AutoHotkey, SQL, HTML, CSS, x86 and x64 Assembly, JavaScript, PHP
- Fast learner, passionate about learning new languages and tools
- Can efficiently write quality code in Visual Studio, Visual Studio Code, and JetBrains Rider
- Familiar with .NET, Blazor, and Xamarin
- Familiar with Git and GitHub
- Familiar with robotics programming and vision
- Critical thinking and solutions focused
- Fluent in efficiency and automation tools
- Experience with both Windows and Linux

Projects

I love to work on side projects in my free time, especially ones to save time, automate tasks, and make life easier. Some of my more pertinent projects on GitHub include:

AutoHotkey V2

- My magnum opus, an extensive repository of AutoHotkey scripts to automate many different Windows tasks and make daily computer use faster and easier
- Includes a mouse and keyboard with extra macro buttons, as well as an Elgato Stream Deck XL, whose button actions change based on the active program
- A revised and revamped original repository of scripts for better layout and organization and more modularity

Photos Storage Server

- A photo and video manager, designed as a free and open-source replacement for Google Photos
- Windows PC on local network that acts as the server
- My largest personal project to date, made in the C# Blazor web framework
- Uses PostgreSQL database for storing information such as what items are in your library, what albums there are and what items are in the albums, what items are in the trash, etc.

Graphical Photo Organizer

- A C# WPF app to organize folders of photos and videos based on when each item was taken
- Allows user to sort items manually or automatically, giving them more control or saving time depending on their needs
- Photos Storage Server has a feature for importing a folder sorted with Graphical Photo Organizer

Unnamed 3D Video Game

- Currently working on designing a 3D action-adventure game with Unity
- Looking to form small team and continue developing the story, world, and characters

Work Experience

Software Design Student

Daktronics—Brookings, SD

May 2022–Present

- Test new versions of software for sign players and processors before release to customers
- Worked with development teams to resolve impediments discovered in testing
- Worked on development teams to improve C# web apps

Kitchen/Food Prep Assistant

Kwik Trip—Caledonia, MN

May 2019–March 2022

- Established strong time management and organization skills
- Prepared patron's orders
- Provided successful customer service and communication skills with a high focus on teamwork and coordination

Special Involvements

Lead programmer for Caledonia FIRST Robotics Competition team

October 2015–March 2020

GenCyber summer camp at Dakota State University

June 2019

Computer Club and Programming Club

Fall 2020–Present

Game Design Club

Fall 2022–Present

References

Peter Britton
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