



Cameron Clay

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 <https://github.com/CameronClay>

 <https://cc-portfolio-one.vercel.app>

Summary

Motivated software developer, seeking a junior programmer/software engineer position in an environment that values quality and maintainable code.

Education

Bachelor of Computer Science - Utah Valley University, Orem, UT

Aug 2016 - Dec 2020

Honors: *summa cum laude* (GPA: 3.97)

Technical Skills

- C++, C# with .NET framework, Python, C, Rust, Java, SQL
- REST APIs, HTML, CSS, TypeScript, JavaScript, React, Next.js, Node.js
- Git, Atlassian, Jira, Team Foundation Server
- Docker, Linux, Windows, Visual Studio, Visual Studio Code, CMake, Qt
- Continuous Integration/Continuous Deployment (CI/CD) and tools such as Bitbucket pipelines and Jenkins
- Unit testing, integration testing, and test driven development
- Object oriented programming, programming principles, and software design patterns
- Databases, computer architecture, and computer networks
- Strong problem solving, debugging, and troubleshooting skills
- Successful in working in agile environments
- Customer service

Projects

Compiler

<https://github.com/CameronClay/compiler>

- Converts source code into assembly code
- Source code language is based on a hybrid of C# and C
- Supports inheritance, polymorphism, and multithreading
- Written in C++

Assembler and Virtual Machine

<https://github.com/CameronClay/asm-vm>

- Converts assembly code into bytecode which can be run by the virtual machine
- Based on Reduced Instruction Set Computer (RISC) instruction Set Architecture (ISA)
- Supports multithreading
- Written in C++

Project portfolio website

<https://github.com/CameronClay/project-portfolio>

- Built using React and Next.js (App Router & Server Actions), TypeScript, Tailwind CSS, Framer-Motion, React-Email & Nodemailer, React-Intersection-Observer, and Outsideclick-React.

- Contains REST API with JSON web token (JWT) authentication. Database used is mongodb with node.js driver.
- <https://cc-portfolio-one.vercel.app>

Discord bot

<https://github.com/CameronClay/zhex-bot>

- Elo bot for a SC2 arcade game, allows server members to join a queue to play against each other and generates a balanced team matchup based on player skill levels
- Written in Python using Discord.py and PostgreSQL

Client-server chat application

<https://github.com/CameronClay/WNLIB-Chat>

- GUI based application similar to IRC, with the ability to connect to a chat server to send and receive messages from server members
- Supports whiteboard
- Written in C++ using WNLIB

TCP-IP networking library [WNLIB]

<https://github.com/CameronClay/WNLIB-Chat>

- TCP networking library which served as the base for writing a Client-Server chat application
- Written in C++ using Windows API and IO Completion Ports

Dynamic functions library

<https://github.com/CameronClay/cpp-dynamic-functions>

- Library which enables the ability to conditionally call functions at compile time based on the parameters passed, and enables those functions to be stored in statically-typed containers (such as an array/vector/arraylist)
- Written in C++ using template metaprogramming

Work Experience

Computer Science Grader - Utah Valley University, Orem, UT

Aug 2019 - Dec 2019

- Graded and provided feedback on students programs, lab exercises, and coding assignments
- Answered students' questions and assisted professor as needed

Front Desk - Comfort Inn, Lehi, UT

June 2016 - Sept 2017

- Answered phone, made reservations, and provided customer service both in person and over the phone
- Performed general maintenance (basic repairs, computer maintenance, and shampooing)
- Assisted housekeeping, maintenance, and the general manager