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Summary:

Seeking a full-time software development position

Education:

Illinois Institute of Technology
B.S. Computer Science
May 2019
Recipient of Heald Scholarship

Metea Valley High School
May 2014
Indian Prairie Scholar

Skills:

- Unity (self-taught, self-directed projects)
- C# (self-taught, self-directed projects)
- Linux C/C++ (CS 350 Computer Organization and Assembly Language Programming, Fermilab project)
- Designing user interfaces with Qt development tools (self-taught, Fermilab project)
- Java (CS 115 Object Oriented Programming, self-directed projects)
- Javascript, WebGL (CS 411 Computer Graphics)
- Python (CS 330 Discrete Structures)
- HTML, PHP, and CSS (self-taught, Varosha project)
- Low-level computer graphics relating to spline interpolation, 3D anti-alias shading, bump mapping, and texture mapping (CS 411 Computer Graphics)
- Extensive experience working with android studio to develop apps (CS 442 Mobile App Development)
- Operating systems programming (CS 450 Operating Systems)
- Data structure and traversal algorithms (CS430 Introduction to Algorithms)

Professional Experience:**Fermilab www.fnal.gov**

Internship June 2018 – August 2018

- Designed an image/information displaying GUI application
- Independently learned Qt creator IDE and Qt libraries
- Implemented several C++/Qt classes
- Debugged code using Qt IDE debugger
- Created a user interface capable of parsing XML files
- Presented project to Mu2e group of engineers and physicists

Varosha www.varosha.org

Webmaster May 2017 - Present

- Redesigned website working with directors of the organization
- Set up payment system for online donation
- Built off of pre-existing css to add more pages to the website
- Delivered requested updates on a regular basis while maintaining constant contact with clients

Personal:

- US Citizen (Eligible for security clearance)
- Playing piano and viola
- Tradition and Digital Art
- Photography and Photo editing

Projects

Unity Tutorial Projects

Personal Project (Unity/C#) March 2019

- Designed games using premade assets
- Wrote scripts from scratch in Visual Studios
- Learned the fundamentals of prefabs and components

C++ Game Simulator

Personal Project (C++) July 2019

- Read information from files
- Calculated results produced by pseudo random number generator
- Implemented analysis mode that runs the game 1000000 times and calculates the average result

School Library Simulator

Database Management Class Project (Java/SQL) March 2017

- Created multiple databases linked to each other representing school textbooks, the classes the books are needed for, and students
- Implemented student, teacher, and admin rolls
- Divided work equally between design and syntax

Malloc

Operating Systems Class Project (C) November 2017

- Created a memory allocator designed to quickly allocate memory while maintaining proper memory utilization efficiency
- Implemented a pseudo-cache linked list which made the memory allocator outperform the Linux OS built in memory allocator in some scenarios

Temperature Conversion App

Android Mobile Applications Class Project (Java) February 2018

- Created an android app capable of converting between Fahrenheit, Celsius, and Kelvin
- Designed vertical and horizontal layout

Fermilab UI

Fermilab Internship Project (C++) July - August 2018

- Learned how create UI using Qt development environment
- Divided the project into manageable modules and delivered the final product on schedule

Connect Four AI

Artificial Intelligence Class Project (Python) October 2018

- Created a basic search AI able to play a game of Connect Four against other AI
- Utilized Alpha-Beta pruning techniques