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**Summary:**

Seeking a rewarding career to design, implement, and test object oriented solutions for challenging software projects involving algorithms, computer graphics, game design, logistics, inventory, and more.

**Education:**

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

**Professional Experience:****Fermilab [www.fnal.gov](http://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](http://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

**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)

## **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

### **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

## **Personal:**

- US Citizen (Eligible for security clearance)
- Proficient with photo editing software such as Photoshop