Alex Sherman

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github.com/alex-sherman

Experience

Human Head Studios, Madison, WI
Developer May 2017 -- Current
- Develop games, netcode and infrastructure (C# and Unity)
- Focus on architecture and networking (C#, Lidgren, PSQL)

University of Wisconsin Madison, Madison, WI
Researcher October 2011 -- May 2017
- Develop software that efficiently utilizes multiple network interfaces (C/C++)
- Deploy WiFi on vehicles such as city buses, ambulances and police cars
- Develop infrastructure to configure and monitor deployments (Fullstack/Python, MySQL)
- Design algorithms to allow vehicles to effectively leverage city wide mesh networks

Skills

Software: Windows, Linux, Visual Studio, Eclipse
Languages: C#, Python, C, C++, Java, JavaScript, HLSL, GLSL, HTML, CSS, MySQL, PSQL

Education

University of Wisconsin–Madison
 B.S. Computer Engineering and B.S. Computer Science, May 2013
 M.S. Computer Engineering, May 2017

Academic Projects (Graduate)
 <u>MRPC:</u> A networking protocol designed for IoT and mesh networking protocols with full libraries for Python, ESP8266 (C/C++), and Android (Java)
 <u>DECO:</u> A Python library that simplifies parallel programming using decorators
 <u>EDSM:</u> A framework for distributed shared memory application development (C++)

Coursework
Artificial Intelligence, Algorithms, Advanced Computer Architecture, Computer Networking, Advanced Operating Systems, Graduate Programming Languages, Graduate Real Time Systems, Graduate Wireless Networking, Graduate Computer Vision

Personal Projects

<u>Video Game Engine:</u> I developed a fully functioning 3D video game engine in C#. The engine provides a unique peer-to-peer networking system along with 3D graphics, physics, content parsing, controller input and sound.

<u>Home Automation:</u> I have developed an Android app and firmware for IoT devices to control appliances in my home. The libraries (MRPC, and Android-Enlight) are available on my github.