Josiah Bills

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3163 Clubhouse Dr Apt 4, Beavercreek OH, 45431

https://github.com/obsgolem

Education

Bachelors of Science in Computer Science Minor in Math Cedarville University

Skills

Selected Programming Languages

C++	\mathbf{C}
CMake	C#
LLVM IR	x86/x86-64 ASM
Python	m Julia
PHP	$_{ m Java}$
Javascript	HTML
CSS	Go
Matlab	Simulink

Selected Technologies

AFSIM	Dakota
Air Force HPC	HDF5
LLVM	Git
OpenGL	SQL

Informally self taught in pure mathematics, especially abstract algebra, category theory, and type theory.

Personal Projects

JL Programming Language

- Designed a fully featured C-like language
- Developed a solution to a complex circular dependency problem
- Developed a full compiler for the language, complete with compile time code execution and code generation with LLVM

Algebraic Geometry Class

- Taking a free online graduate level course on scheme theory
- Taught by a Stanford Professor

Experience

Fall 2018-Present

Modeling and Simulation developer Radiance Technologies

- Developing and sustaining AFSIM core
- Supporting AFRL in the integration of MATLAB models into the AFSIM framework
- Providing help desk and support for AFSIM users
- Using Dakota by Sandia to perform satellite constellation trade analyses
- TS clearance

Summer 2018

HPC Developer Applied Research Solutions

- Implemented methods for doing laser simulations on the Air Force HPC
- Worked with experts at the AFIT Center for Directed Energy to develop models

Fall 2017-Spring 2018

Cedarville University Senior Design Team Cedarville University

- Helped to design the payload for an educational remote access trojan
- Designed a framework for loading and unloading exploits
- Implemented privilege escalation exploits
- Advised team on Mac OS X development

 $Summer\ 2017$

Software Developer Subcontractor **Design Software LLC**

- Designed a preview and export tool for schematics of buildings
- Researched Google Sketchup, Google Layout, and DXF apis.

Spring 2017

Volunteer Software Developer LightSys Code-a-Thon

- Worked with a team of programmers to redesign a website in 5 days
- Made use of a LAMP stack