

Robert Kernan

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<https://github.com/kernan>

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EDUCATION

Georgia Institute of Technology, Atlanta, GA
Bachelor of Science in Computer Science
Focus in Information Internetworks and Platforms

August 2013

TECHNICAL SKILLS

Languages

C, C++, C#, Java, Lua, PHP, Python, Ruby

Systems

Windows 95/NT/XP/Vista/7/8, GNU/Linux

Software

Ant, Clang (LLVM), CMake, Eclipse, GNU Compiler Collection, Make, MySQL, SQLite, Visual Studio

Revision Control

Git, Mercurial, Subversion

WORK EXPERIENCE

Southern Polytechnic State University, Marietta, GA
Lab/Teaching Assistant for CSE 1302: Introduction to Data Structures

May 2010 – July 2010

- Assigned lab-work and taught supplemental material.
- Maintained office hours in the lab for students.
- Submitted software requests for lab equipment.

PROJECTS

Vector Math Library

April 2014 – Present

<https://github.com/kernan/math>

Built and currently maintaining a C++11 header-only library containing generic size and type vector and matrix implementations with specializations for 2, 3, and 4-dimensions. Includes a unit test suite built using Boost.

Graphics Engine

July 2013 – Present

Building a simple, cross-platform (Windows and Linux currently) graphics engine using OpenGL as the rendering backend. Current goals are implementing a more advanced input handling system and adding lighting primitives to the scene.

Geopost

June 2013 – August 2013

<https://github.com/spardue/geopost>

Designed and developed a REST API for creating geo-tagged content using Python. Collaborated to build an HTML5 front-end that displayed geo-tagged content on a map using the Google Maps Javascript API.

Massive Open Online Course (MOOC) Teaching Assistant Manager

January 2013 – April 2013

<https://github.com/kernan/MOOC-TA-Management>

Collaborated to design and build a web application for testing and managing teaching assistants for MOOCs using Ruby on Rails; utilized Twitter Bootstrap to create a reactive front-end. Included a REST API for all functionality.

International Community School Joomla Intranet

March 2012 – May 2012

Collaborate to modify and complete an intranet using Joomla that enabled teachers to communicate with students about assignments and upcoming events.

Parser Generator and Regular Expression Language Interpreter

November 2011 – December 2011

Created scanner, parser, and interpreter in Java for a regular expression language that could find, remove, and replace text patterns in a file. The scanner and parser tables were not language specific and could be generated by feeding the program a context-free grammar.