ANDREW L SMITH

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Online Portfolio: alsmith.net

SKILLS

In order of familiarity

- **Working Knowledge (Extremely Comfortable)**
  - Languages: Java (+Android), C, C++, C#, Python, JavaScript/jQuery, GLSL, GML, HTML/CSS
  - Tools: Windows, Git, Emacs, XNA/MonoGame, Modern OpenGL

- **Basic Knowledge (Some Experience)**
  - Languages: SQL/MySQL, x86 assembly, MIPS assembly, VHDL
  - Tools: Linux, MSVC, Visual Studio, Subversion, Unreal Engine, Windows Batch Scripting

EDUCATION

Georgia Institute of Technology, Atlanta, GA 8/2013 – present

- B.S. Computer Science, Expected Graduation: 12/2016.
- Current GPA: **3.93**

WORK EXPERIENCE

Software Engineer Intern, Microsoft, Redmond, WA 5/2016 – 8/2016

- Implemented various front-end improvements to the Microsoft Dynamics CRM web application. Worked extensively with JavaScript, Ext JS, and the Bing Maps API.

IT Intern, The Home Depot, Atlanta, GA 5/2015 – 4/2016

- Learned brand new technologies and developed proof-of-concept applications demonstrating their feasibility in a short time-frame to help drive business decisions on which technologies to invest in. Worked entirely in Java, mostly developing Android app prototypes.

SCHOOL PROJECTS

Tiger to MIPS Compiler (Java)

- A compiler that converts a simple language specification, dubbed “Tiger”, into MIPS assembly. Implemented with no code generation tools—all of the stages of a basic compiler were written by me. This includes the scanner, parser, type-checker, IR generator, register allocator, and assembly emitter.

3D Raycaster (Java + Processing)

- Renders 3D scenes via raycasting. Reads polygon, material, and lighting information in from a text file. Uses Phong lighting model and supports shadows and reflections.

PERSONAL PROJECTS

Live MLB Scoreboard (Python + Raspberry Pi)

- Program that asynchronously fetches data about the score (or start time) of a given MLB team’s game, their division standings, as well as the local weather. Runs 24/7 on my Raspberry Pi and displays the data visually on an unused monitor.

CSub Subtitle Player (Java + Swing)

- Reads in .srt subtitle files and plays them back in real time. Attempts to always stay on top, even if a video is in full-screen mode. Perfect for adding subtitles to videos if one’s video player doesn't have a built-in subtitle feature.

Various Game Prototypes (C++, C#, MonoGame, GML)

- Several small game engines that I have written for fun. These include three 2D platformer engines, as well as a 3D puzzle platformer engine, which I am currently working on.