

# Andrew H. Shidel

## WORK EXPERIENCE



JUNE 2016 – SEPT 2016

### Parallel Systems Architecture Internship

- Worked in a large group on a GPU simulator written in c++.
- Added new debugging functionality to simulator for parallel compute pipeline.



SEPT 2015 – MAR 2016

### Systems Infrastructure Co-Op

- Contributed to chip simulation and build verification infrastructure projects in a 12 person engineering group.
- Worked with a small team of engineers on an Eclipse based IDE for performing builds, managing projects, and running chip simulations.



SEPT 2014 – MAR 2015

### Software Engineering Co-Op

- Developed a live sports data collection service with a small group of programmers.
- Built system monitoring applications for streaming and meta-data services.
- Designed and implemented an audio visualization library in C# and C.
- Built database management tools in Java and Python.



SEPT 2013 – MAR 2014

### Software Development Co-Op

- Led small team in development of mobile applications for iOS and Android platforms.
- Interfaced with and contributed to a WCF cloud service to transmit and receive data.
- Built a Database import utility using C#, VB, WPF, and SQL.

## PROJECTS

**Genotype:** [shidel.com/genotype.html](http://shidel.com/genotype.html)

A programming language built specifically for Genetic Algorithms. Implemented on top of a custom instruction set and VM.

**Chrome Leap Tools:** [shidel.com/leapttools.html](http://shidel.com/leapttools.html)

A Chrome extension enabling gesture based browsing using a Leap Motion Controller.

**Green Screen Photography:** [shidel.com/greenscreen.html](http://shidel.com/greenscreen.html)

Image editing application for Android. Built to capture images, remove backgrounds, and layer images.

**WheresItAt:** [WheresItAt.io](http://WheresItAt.io)

A meta search engine that finds stores near you that sell what you are looking for.

**Android Quadcopter:** [shidel.com/zepkor.html](http://shidel.com/zepkor.html)

An open source quadcopter OS build using Android, UDP, and a leap motion camera as the control system.

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## TECHNICAL SKILLS

Advanced Knowledge	C/C++, JAVA, JavaScript/CSS, PYTHON, Perl
Intermediate Knowledge	GO, Ruby, C#, SQL, ML L <sup>A</sup> T <sub>E</sub> X, PHP, Haskell, Prolog CUDA, OpenCL
Basic Knowledge	Matlab, Maple, Visual Basic, MIPS Assembly, Lisp, VHDL
Platforms	Linux (Ubuntu, Cent), Windows, Mac, IOS, Android

## EDUCATION

**Drexel University** SEPT. 2012 - PRESENT

*Bachelor of Science in Computer Science*  
*Minors in Business Administration and Mathematics*  
*Expected Graduation: June 2017*

## RELEVANT COURSEWORK

MATH	Calculus I, II, III, IV, Linear Algebra, Discrete, Statistics, Graph Theory
Computer	Alg. and Data Structs., Software Design, Programming I, II, Systems Programming, Advanced Programming Tools & Techniques, Artificial Intelligence, Systems Architecture, Digital Design, Concurrent Programming
ENGINEERING	Engineering Design Lab I & II, Dynamic Engineering Systems
SCIENCES	Physics I, II, III

## UNIVERSITY PROJECTS

**Silk Tours:** [silktoursapp.com](http://silktoursapp.com)  
Silk Tours is an Android and IOS app that can connect travelers with local guides in their area. Currently in development as a senior design project with a group of Drexel students.

**Groupit:** [shidel.com/groupit.html](http://shidel.com/groupit.html)  
An Android app providing a simple, universal means for organizing and communicating between any group or organization. Built with a team of Drexel students, using Java, Node.js, and the Facebook SDK.

**Opened Fire:** [openedfire.com](http://openedfire.com)  
Worked with a team of fellow students to create an online multiplayer RPG game for Android, IOS, and web browsers using HTML5 canvas, JavaScript, Node.js, and WebSockets.