James Magahern

2350 E Water St. A111
Tucson, AZ 85719
(480) 280-6575
james@magahern.com
james.magahern.com

ME BRIEFLY Computer Science Student from The University of Arizona; has written and published Apps for iOS; developed a 2D Physics simulator and game engine in Java with three others; I ♡ computers, efficient algorithms, attention to detail, beautiful code, and Segways.

ACADEMIA University of Arizona, Tucson, AZ
Bachelor of Computer Science (expected May 2012)

North Canyon High School, Phoenix, AZ
Graduated with Advanced Placement credit

Member of the **Association of Computing Machinery (ACM)** and the **IEEE** (University of Arizona Chapters)

EXPERIENCE

iOS/Cocoa

- Created a fully playable children's game from start to finish during my Summer '10 internship at IDEO LLC. Gained thorough understanding of the *Cocos2D* Framework and some remedial OpenGL tasks. (*Published on the App Store under Balloonimals Pop!*)

- Following the *Balloonimals Pop!* project, I used my advanced knowledge of the Cocos2D framework to develop another game for the iOS App Store. Much more algorithmically challenging, involving the translation of human-drawn lines to bezier path data structures, among others. (*Published on the App Store under "Highway King"*)

- Worked with a team to develop a media-rich marketing application for enterprise (and commercial) distribution for IT Software company *Teradata Inc.* Used the MediaKit framework extensively to produce an interactive, lively PowerPoint-esque marketing app. (*App is available on the App Store under "Learn From The Leaders"*)

- Currently developing a social-bookmarking recipes app heavily engaging knowledge of networking, XML parsing, and advanced UIKit adaptation. (*Will be available on the App Store under Yummrs!*)

- Explored curiosity in Reverse Engineering to develop a few iPhone OS modifications for the Cydia store. (*Most notable tweak is called "ChatPic", most controversial would certainly be "HackCenter"*).

Web

- Used knowledge of Python and Django to work on the interface for the International Internet Classroom Project (*iic.cs.arizona.edu*). Also used CSS and Javascript skills to design an aesthetically pleasing front-end user interface.

- Wrote an entire bulletin-board system from scratch in PHP, MySQL. Created for my High School class as a social-networking concept (self-proclaimed as the "Facebook for High Schoolers" before non-college students were allowed to join). (*Available for preview on http://ibappo.zanneth.com*).

- I designed and implemented my own personal website, which houses my (currently out-of-date) portfolio and some other musings. *Available for perusing at http://james.magahern.com*

Python	• Worked with a small group to develop a multi-touch enabled Kiosk for the Computer Science department written in Python using the PyMT library.
	• Used Django to tie in with MySQL to implement a relational database for the International Internet Classroom Project (mentioned above).
Java	• Worked on a very awesome 2D Physics Engine written entirely in Java called **Contrapulator**. Used knowledge of object oriented programming, gained good experience with working with others (for better, or for worse). *(This project is available for download on my website!)*
	• Developed a 2D Game Engine and Arcade cabinet simulator with three others called **Impulse Engine**. Gained a lot of experience in writing API's for other developers to use (the goal of the project), which I enjoyed very much. *(This project is available for download on my website!)*
C/C++	• Worked with Dr. Kobus Barnard (*http://kobus.ca*) in the Computer Science undergraduate research department on the *Words and Pictures* project. During my time I developed a natural language processor for use in converting journalist/human drafted sentences to relevant computer data structures.
UNIX	• Currently maintain more than a dozen Linux, Solaris, and BSD servers at my University. I am very comfortable in POSIX environments.
	• Wrote many Perl, BASH, and Python scripts to accomplish tasks such as adding accounts to an LDAP domain controller, parsing log files, and security scans as a systems administrator.
Graphic Design	• Drafted several logo designs, album artwork, and application icons for colleagues, clients, etc. Photoshop is a hobby of mine. (*Many of these design projects are available for viewing on my website.*)
AWARDS	Apple Worldwide Developers Conference Scholarship winner two years in a row (2009-2010).

WORK EXPERIENCE

University of Arizona CS Dept. *Tucson, AZ* (August 2010-Present)
Undergraduate Researcher; under Dr. Kobus Barnard on the *Words and Pictures Project.*

IDEO LLC. *Palo Alto, CA* (Summer '10)
iOS Software Engineering Intern; worked on *Balloonimals Pop!* for iPhone, and *Balloonimals* for iPad.

Objective Coders LLC. *Tucson, AZ* (September 2010-Present)
iOS Software Engineer; Objective Coders is an iOS software consulting and contracting company in Tucson. Developed *Highway King* under this publisher.

University of Arizona ECE Dept. *Tucson, AZ* (March 2010-Present)
Systems Administrator; I administer and maintain a handful of UNIX and Solaris based machines in the Electrical and Computer Engineering Department.

University of Arizona 24/7 IT Support Center. (September 2009-March 2010)
Tucson, AZ
Student IT Support Analyst; provided computer support to my fellow college students at the University. Good human interaction was required, learned how to speak to humans.