# SETH W. LIPKIN

3 Riverbend Rd, Hopkinton, MA 01748, seth.lipkin@gmail.com, 508.308.3570

# **Executive Profile**

Results-oriented software developer with expertise in a wide range of technologies and markets. Experienced in all stages of product design, development, and life-cycle management. Passionate about making stellar products for mobile devices, the desktop, and the web.

#### Shipping iPhone/iPad apps

- Quick Key Mobile student quiz scanner
- PoKos Chat location-based XMPP chat
- Spin Doctor retro game
- iamhungry location-based deal-finder
- SketchPad HD note-taker for iPad
- Creator of Meeting Maker
- Creator of PhotoParade suite of products
- iOS / Objective-C / Cocoa

# iOS apps in progress or for private use

- Commercial real estate showcase app
- ClipFile information organizer
- Photo manipulation app
- cross-tables informational app in App Store
- PHP / C / C++
- DHTML / CSS
- AJAX / JQuery / Javascript

# **Professional Experience**

# INDEPENDENT SOFTWARE DEVELOPER, Hopkinton, MA (2009 to present)

- For Quick Key Mobile, developed system to scan and grade students' quizzes using iPhone camera.
- Incorporated public-domain OpenCV library to enable fast and accurate recognition of test sheet bubbles.
- Created a scanning testing system to ensure that no edge cases would break as scanning evolved.
- Created PoKos Chat, a location-aware iPhone chat application which uses XMPP ("Jabber") technology.
- Created iamhungry, a location-based iPhone app with social media integration.
- Created the iPad app "Sketchpad HD" as a collaboration with Raizlabs.
- Created the iPhone game "Spin Doctor" by porting original C code from the Macintosh Spin Doctor game.
- Used cocos2d library as a layer on top of OpenGL to produce a 60 fps graphics experience.
- Improved the cocos2d system to provide smoother transitions between gameplay and native iPhone screens.
- Aggressively optimized Spin Doctor's memory footprint without sacrificing performance.
- Managed the creation of all game and collateral artwork.
- Integrated Google Analytics for Mobile to understand patterns of usage.

#### FOUNDER, GIVVY, INC., Framingham, MA (2008 to 2009)

- Created Givvy.com, a site for learning about effective charitable giving.
- Became expert at "Symfony", a PHP-based framework (similar to Ruby on Rails).
- Implemented AJAX technologies to provide site visitors with an optimal experience.
- Imported and made searchable a database of 1.4 million public charities.
- Created community-building features, including a custom message system and a friends network.

#### CREATOR, CROSS-TABLES.COM, Hopkinton, MA (2005 to present)

- Created the site as a purely volunteer effort after noticing a need in the competitive Scrabble community.
- Continuously added features to help make the site the nexus for all of North American Scrabble.
- Used Javascript/AJAX technology to allow players to post and replay games online.
- Reverse-engineered binary file format of a popular Palm application to help players track their study progress.
- Created an API to allow others access to the site's raw data
- Created an iPhone app, using the API to provide and excellent mobile experience.

# FOUNDER, CALLISTO CORPORATION, Natick, MA (1989 to 2006)

- Created Meeting Maker, a groundbreaking group meeting scheduler for Macintosh networks.
- Two-person team was responsible for all technical elements of product, from a friendly user interface to complex RSVP/notification logic to synchronization of multi-server hand-coded databases.

- Created innovative system which allowed searching of the schedules of all key meeting attendees for a mutually agreeable time, while keeping in mind privacy considerations. Created flexible and easy method for scheduling recurring meetings.
- Meeting Maker was quickly adopted by many Macintosh-based companies, including Apple Computer itself, and still exists today.
- Created the PhotoParade line of digital photo slideshow products. Created real-time graphics transformation system, including distortions, auto-color balance, and sharpening. Designed and implemented a compiled C-like language to enable powerful slideshow logic in themed plug-ins.
- Created system which enabled users to e-mail slideshows without having to worry about confusing file attachments and their size limits.
- Created an easy-to-use custom version for Wal-Mart Portrait Studios that sold millions of units while requiring minimal customer support. Was responsible for all aspects of web technology, including shopping carts, store-and-forward slideshow-sending system, and a system for unlocking digitally-downloaded products.
- Created PhotoParadeShare.com, a web site for sharing photos. PhotoParadeShare.com was skinnable to an unusual level via CSS, allowing a finished look that was unavailable on other photo sites. Designed site with scalability and redundancy in mind. Created powerful security system to ensure users' full control of photo privacy. Used AJAX throughout for fast response and convenience.
- Created a series of Macintosh games, including the still-unique "Spin Doctor" and its sequel, "ClockWerx". Helped create a set of goals, obstacles, and enemy behavior for the game. Created an optimized sprite-based graphics system that was able to keep an acceptable frame rate even on slower computers of the day. Two of the games were chosen by Apple for inclusion with a variety of Macintosh computers, including the Performa series.
- Ported a series of educational titles of Davidson & Co., including a set of Math Blaster titles, from Windows to Macintosh. Quick and reliable turnaround times enabled Davidson to ship hybrid Windows/Mac products on a tight schedule. Created some original titles for Davidson, including Algebra Blaster and Typing Tutor 7.

# SENIOR SOFTWARE ENGINEER, GCC TECHNOLOGIES, Waltham, MA (1984 to 1989)

- Created the gameplay logic for an Atari 2600 video game cartridge, Track & Field. Coding was in highly optimized 6502 assembly with less than 128 bytes of RAM.
- Reverse-engineered a large section of the Macintosh file system to help support HyperDrive, the first internal hard disk for the Macintosh. Improved system that partitioned single disks into virtual disks on the fly.
- Helped create the Personal Laser Printer (PLP), the first Quickdraw-based laser printer for the Macintosh. Was responsible for managing the overall printing process flow, creation of all desktop user interface elements, and for ensuring full compatibility with hundreds of existing Macintosh applications.

# Education

### **CORNELL UNIVERSITY, Ithaca, NY**

- Bachelor of Science in Electrical Engineering, 1984
- Concentrations in computer hardware design and software development.
- Tau Beta Pi and Eta Kappa Nu Engineering Honor Societies.

#### **Professional Interests and Hobbies**

- Expert-level Scrabble player
- National Scrabble Association Person of the Year, 2009