## FOUNDER - CEO

## Professional Summary

Enthusiastic problem-solver searching for unique and interesting challenges to solve while acquiring new skills. Over nine years of experience in programming with a solid understanding of the software development lifecycle. Proficiency in an extensive variety of programming languages with the ability to learn and adapt to new technologies rapidly. Skills

- C/C++
- Objective-C
- Python
- PHP
- Javascript
- Linux
- CSS
- Windows
- HTML
- CVS / GIT
- Java
- Bash
- SOL
- Tcl/Tk

## Work History

Wells Fargo Founder - CEO | Brigham City, UT | March 2012 - Current

- Co-developed iOS application AdaptiScan currently available on iTunes Store.
- Application allows users to scan barcodes or magnetic cards directly into any web application by integrating seamlessly with the Linea-pro
  peripheral device.
- Co-developed iOS application RecipeBlender currently available on iTunes Store.
- Application is a recipe ingredient search engine, allowing users to add ingredients from their kitchen pantry to find matching recipes from the
  top three recipe websites.
- Designed with expansion in mind runs on Amazon Web Services (AWS) including RDS, S3 and Elastic BeanStalk.
- Researched, designed and implemented scalable Python based web crawler updates recipes on a continual basis.

Management Decisions, Inc. Lead Software Engineer | Mclean, VA | October 2007 - Current

- Implemented an OpenCV based shape detection algorithm used for correcting the robots position in locations where a laser range finder is ineffective.(C++)
- Lead designer and developer of dietary concierge iOS application. Implements SIPS based voice and messaging capability to allow users to
  interact with each other. Also allows for robots to alert users of incoming and pending deliveries. Lead designer and developer for a secure
  internal web-based product management and configuration tool for an entire fleet of robots. Allows for employees unfamiliar with Linux to
  configure and monitor all aspects of the robot including, but not limited to setting parameters, installing maps, and configuring networking.
  (PHP, Javascript)
- Lead designer and developer of a new, intelligent elevator management and queuing system. This central system handles all TCP and UDP communications between the company's robots and the hospital's elevators. Optimizations include efficiently emptying and readying cabins based on current and future demand according to individual robot priorities and current cabin positions. (Tcl) Implemented an advanced line-to-line shape matching algorithm to improve detection and location of the product's charging base using a laser range finder. (C++, OpenGL, Tcl)
- Integrated support for the SICK LMS100 laser to aid in the creation of hospital maps. Interfaces to our system via TCP ethernet connection. (C++)
- Updated existing vision system for V4L2 support, allowing functionality with an expanded range of newer web cameras (C+++)
- Implemented a joystick control system to ease customer recoveries, while also saving time and money during new site installations. (Tcl, C++)
- Â Optimized inefficient memory allocations on entire fleet of robots, decreasing total system memory usage by 15%. (C++)
- Created web-based command center, allowing internal users to see real-time status of all major systems. Users can view all active robots
  current path progression, error states, and real-time status of customer elevators. Also allows for basic recoveries from any web-based
  device (basic drive and imaging commands implemented). (Tcl, PHP, Javascript)
- Integrated existing software system with SRI's Karto mapping system, decreasing cost and time of new installations. Created custom 900 MHz noise and 802.11 strength signal tracking system to aid in creating visual network maps. (C++, Tcl)

1-800-Flowers.Com, Inc. Software Engineer | Medford, OR | July 2005 - October 2007

- Lead designer and developer for mission critical 24/7 help desk server, utilized for real time robot tracking.
- This server is connected to all customer sites 24/7 via SQL ssh tunnels.
- As individual robots run into obstacles they cannot handle alone, they request help via these tunnels.
- Each request for help is categorized and filtered allowing the company's help desk to resolve each issue.
- Internal reports allow management to track and find recurring problems.
- This server doubles as the company's Intranet which handles ongoing software and hardware bug tracking as well as an employee directory, knowledge base, and file server. (PHP, Javascript, MySQL, shell).

- Ground up redesign of customer's touch-screen interface to allow for easier future maintenance.(PHP, Javascript).
- Lead DBA handling database design, optimization (server handles over 250,000 robot requests per month), backup, replication (setup and maintain dual replication servers for redundant protection), and recovery strategies for the 24/7 help desk server. (shell, MySQL)

Flipside Media Inc Web Developer | City, STATE | January 2005 - March 2005

- Introduced and setup a CVS repository to help ease development of all current and future company products.
- Developed stable, efficient code for use on high traffic questionnaire systems under short deadlines.
- Designed and integrated a PHP SOAP server to accept incoming asynchronous messages generated via telephone questionnaires.

## Education

Master of Science Computer Science Georgia Institute of Technology City, | Current Computer Science
Bachelor of Science Computer Engineering University of Pittsburgh City, State | 1 2004 Computer Engineering
Certification, PHP 4.0 Zend Certified Engineer (2005); Pittsburgh, PA MCTS: Microsoft Certified Technology Specialist City, State | 1 2009
Skills

backup, basic, C, C++, hardware, CSS, CVS, version control, database design, debugging, Eclipse, Engineer, ethernet, help desk, HTML, IDE, imaging, Java, JavaScript, laser, Linux, memory, messaging, C#, Microsoft Certified, money, Windows, MySQL, network, networking, OpenGL, optimization, DBA, developer, cameras, PHP 4, PHP 4.0, PHP, product management, PROGRAMMING, Python, real-time, real time, servers, Shell, SOAP, SQL, ssh, Tcl, Tcl/Tk, telephone, view, vision, Visual Basic, websites, XML Additional Information

 PERSONAL PROJECTS Running For Laptops Management Team - IT/Developer Currently working on receiving my private pilots license