Sagar Pandya

sagargp@gmail.com

OBJECTIVE

A position in a challenging environment where I can apply my software skills to practical solutions.

EDUCATION

MS in Computer Science — Conferred May 2012
University of Southern California — GPA: 3.75

BS in Computer Engineering — Conferred June 2009
University of California, Santa Barbara — Major GPA: 3.52

QUALIFICATIONS

Programming: BASH, C/C++, HTML & CSS, Java, JavaScript, Matlab, PHP, Python, SQL.
Tools: *nix Administration, Adobe Photoshop, Git, Matlab, ROS, Subversion, Vim.

WORK EXPERIENCE

Affiliate Intern, Jet Propulsion Laboratory, Pasadena, California (June 2012-November 2012).
Performed optimizations of an automated target recognition system in Matlab. Implemented optimizations in C compiled into MEX files. Ported a novel target detection algorithm from raw C to MEX to test its effectiveness in the overall target recognition pipeline.

Graduate Technical Intern, Intel Corporation, Hillsboro, Oregon (May 2011-August 2011).
Researched methods for the implementation of a tool that facilitates the rapid development of device firmware. Prototyped the tool using Python and the wxWidgets graphical toolkit.

Developer Intern, Novacoast, Inc., Santa Barbara, California (June 2008-July 2010).
Led an intern in the development of a web application using PHP, JavaScript, Adobe Flex, and MySQL. Developed an enterprise data-synchronization engine using Python, XML, and XSLT. Worked on feature and stability enhancements of a Linux-based business server suite written in Python.

ACADEMIC EXPERIENCE

Graduate Research, iLab, University of Southern California (Fall 2011-Spring 2012).
Developed robotics control software for an in-house modular robotics framework using C++, Objective-C, and Python. Optimized a computer vision algorithm for the lab, gaining a 200% speed increase using SSE2 and SSE3 compiler intrinsics.

Senior Capstone Project, UC Santa Barbara (Fall 2008-Spring 2009).
Developed an electronic door lock that sensed a user's presence via their Bluetooth device. Designed custom electronic parts, schematics, and circuit boards using Mentor Graphics tools; developed embedded code that interfaced with RS232 devices and MAC layer protocols; programmed a web application for device configuration; and implemented a server backend to manage the device on a network. Development in C, PHP, and SQL.

EXTRACURRICULAR

Professional Memberships: Electrical and Computer Engineering Honor Society (HKN), USC Robotics Society.

Nimbus: (Objective-C) Kickstarter funded FUSE filesystem that allows Mac OSX users to mount their CloudApp account as a virtual disk.

Automover: (Python) Flexible command-line utility that sorts media based on contextual hints in the filename.

Minimum Distance: (C++) ROS node that segments point-cloud data to find the closest pair of colored blocks.

Trollicons: (Ruby) Build system that creates emoticon packs for several instant messenger applications. Allows the classification of icons into namespaces for cleaner organization. Resulting icon packs have over 20,000 downloads.

iJoystick: (Objective-C) iOS application that controls a robot over UDP by sending joystick data as JSON strings.