

# Michael Pavone

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## SKILLS

**Languages:** C, C++, Python, PHP, Javascript, SQL, C#

**Version Control:** Mercurial, Subversion

**Databases:** Oracle, MySQL

## PERSONAL ACCOMPLISHMENTS

### Creator of the Rhope Programming Language

- Designed a duck typed dataflow language with a transaction mechanism to manage shared state
- Wrote multi-threaded interpreter in C and self-hosted compiler
- Wrote basic web server and blog in Rhope

### Reverse Engineering

- Reverse engineered the boot process of the Sega CD game console
- Reverse engineered the proprietary file system used by the 3DO game console
- Reverse engineered the file format for Google's Dalvik Java VM

### Open Source

- Wrote the first recovery tool for the Atheos File System (AFS) used by Syllable
- Helped track down bugs in Syllable's AFS implementation

## EXPERIENCE

January 2010 - Present

### Senior Software Engineer - CitationAir

- Took over maintenance of a production critical application
- Mentored junior developer
- Bridged the gap created when the primary developer of a C# WPF app left despite having little prior experience in those technologies

October 2008 - December 2009

### Software Engineer - CitationAir

- Wrote a distributed event processing program in Python
- Refactored complex methods in a large PHP application to improve readability and performance

July 2006 - October 2008

### Application Developer - Design2Launch, Inc. (acquired by Kodak in April 08)

- Restructured code into classes to promote better modularity in the code base of a large PHP web application
- Reduced maintenance and deployment time by better separating customizations for individual clients from the core code
- Wrote an Adobe Illustrator plugin that communicated with the core PHP web app using SOAP

- Enriched the end user experience through judicious use of DHTML and AJAX
- Optimized complex code and queries to deliver better response times

June 2002 - July 2006

**Programmer** - Triadicon, Inc.

- Designed and developed an integrated publishing system for a major plant nursery using PHP, MySQL, C and ODBC
- Saved 1.5 days out of a recurring 3 day process by developing an automated document creation workflow
- Developed an Adobe InDesign plug-in using C++ to import and format data
- Wrote a time sheet application for Palm OS that exports to Quickbooks

## **EDUCATION**

Attended Drexel University - September 2002-June 2004