MICHAEL FICARRA

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OBJECTIVE Full-time position in the software architecture and engineering field

EDUCATION Worcester Polytechnic Institute, Worcester, MA

Master of Science in Computer Science, expected May 2012
> *Thesis:* Compiling Cryptographic Protocols to a Declarative Target

Bachelor of Science in Computer Science, awarded February 2011
> *Major Qualifying Project:* Generating Universal Models for Geometric Theories

INFLUENTIAL COURSEWORK
Software Security Engineering · Protocol Analysis · Database Systems · Algorithms
Techniques of Programming Language Translation · Discrete Mathematics
Object-Oriented Analysis & Design · Operating Systems · Software Engineering

EXPERIENCE *Google Caja Intern, Google Summer of Code 2010*   *May to August 2010*
Caja is a Google project, the goal of which is to transform untrusted JavaScript into JavaScript that can be safely run in a trusted environment. Determined why popular JS libraries would not compile and proposed fixes to both the Caja and library developers.

Web Application Developer, Solstice Technologies   *January 2008 to August 2010*
Worked on and managed projects that require the use of a server-side scripting language, most commonly PHP, and a database such as MySQL. Projects are taken from basic concept to finished product through collaboration and teamwork with fellow employees.

Intern, Skarven Enterprises, Berkeley Heights, NJ   *May to August 2009*
Designed and implemented a custom, domain-specific programming language to be used by people with little prior knowledge of programming languages so they could create integration tests for the company's main product. The compiler and interpreter for the custom language were written entirely in Ruby and on a Linux OS.

TECHNICAL SKILLS
Expert	JavaScript, CoffeeScript
Proficient	Haskell, Ruby, C, PHP, SQL, HTML, CSS, BASH
Capable	Scala, C++, Java, C#
Interested	Self, Smalltalk, Erlang, Perl, Python, Go, F#, Scheme, Boo, Groovy

ACHIEVEMENTS Major CoffeeScript language developer and active maintainer of its official compiler

Technical editor for the Pragmatic Programmers' CoffeeScript book

Contributor to at least 35 open source projects, mostly libraries or developer tools

Contributor to other JavaScript-related compilers including js2coffee and UglifyJS

INTERESTS Programming language design and compilers

Software security, applied logic, and protocol analysis

JavaScript, particularly its application outside a browser environment

The event-driven paradigm seen in languages like JavaScript and Self

The actor model of concurrent computation, as seen in Scala, Io, and Erlang

The efficient workflow achieved through test-driven development

PORTFOLIO *Github*   http://github.com/michaelficarra