

# EDA Staffing, Inc.

AA061016

210 Broadway, Suite 106, Lynnfield, MA 01940  
132 Central St., Suite 206, Foxboro, MA 02035

(781)598-8061  
(508)543-0333

## Education:

**Yale University.** - PhD, Computer Science **December 2012**  
Project: Deterministic Parallel OpenMP. Advisor: Bryan Ford.  
Co-author (team member), OSDI Best Paper Award, 2011.

**Columbia University.** - BS, Computer Science **May 2006**  
Theory track. Russell C. Mills Award. Contributed to research project on Arabic morphology.

**Yale University.** - PhD, English Language and Literature **May 1984**

**Columbia University.** - BA, English and Comparative Literature **May 1978**

## Technical Skills:

Programming Languages - C++ (current), C, C#, Java, Perl, Python, PHP, Haskell, ML, R

Markup and Query Languages - HTML, LaTeX, Dot, SQL

Operating Systems Used - Linux, Windows, Mac OS X

Tools Used - GCC, GDB, Clang/LLVM, LLDB, Xcode, Visual Studio, VI (Gvim)

## Experience:

MathWorks, Inc. - Natick, MA **September 2012–present**

### **Software Engineer - (C++, Perl)**

- Code Generation Intermediate Representation team, improving and optimizing the IR for tools to translate from MATLAB and Simulink down to C or HDL.
- Developed a new LLVM back end.
- Developed features to enforce expected semantics, ensure correctness, and facilitate testing.
- Improved generated code performance by as much as 100-fold.
- Refactored legacy code using test-driven development and *Clean Code* principles.
- Supervised QE projects.
- Fixed and prevented bugs caused by misunderstood semantics, hidden numerical transformations, and vulnerabilities to undefined behavior.
- (C++, Perl.)

Google, Inc. - New York, NY

**May 2011 –September 2011**

**Summer Intern – (C++)**

- Site Reliability Engineering team.
- Designed and developed a tool to gather and report data on high-latency operations in the distributed storage infrastructure
- (C++)

Google, Inc. - New York, NY

**May 2010–August 2010**

**Summer Intern - (Python)**

- DoubleClick team.
- Designed and developed an integrated testing infrastructure for their new advertisement tracking tag server
- (Python)

Ellington Management Group - Old Greenwich, CT.

**May 2007–August 2007**

**Summer Intern – (Python)**

- Developed a custom Web services infrastructure, including parser, serializer, asynchronous parallel message handler, deserializer, and CLR IR code generator (C#), together with unit and system tests
- (Python)

Microsoft Research - Redmond, WA

**May 2006–August 2006**

**Summer Intern – (C++, .Net)**

- Designed and developed a demonstration project to infer a context-free grammar from the source code of a hand-written parser, using Microsoft's Phoenix compiler toolkit (C++ .Net).

### **Previous Career**

**Associate Professor, English and Comparative Literature,**

University of South Carolina, Columbia, SC. August 1984–August 2004.

Research and teaching on poetry and poetics. Mellon Postdoctoral Fellowship, Cornell University, 1986. Tenure: 1994. Fulbright Senior Scholar, Germany, 2001.