

# M. Isaac Jones

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**Objective:** Career opportunity applying my skills in computer programming and program analysis.

## Qualifications:

- \* Experience in large development projects in Java, C, C++, and ML; Smaller projects in Perl, Pascal, HTML, LaTeX & Texinfo, Lisp/Emacs Lisp, GTK, Scheme, & OCaml.
- \* Knowledge of development tools including Make, CVS (and other version control systems), Debuggers, Bugzilla (and other bug tracking systems), and the UML (UNIX, Linux, PC, Macintosh).
- \* Successful in facilitating communication between technical and non-technical interests.
- \* Knowledge of software engineering concepts including: software design, dataflow analysis, slicing, regression testing, design & development of reusable and object oriented components.

## Experience:

- \* **Full Time Software Engineer** Ohio State University - CIS Department, Columbus, OH (Sept. 2000 - July 2001)
  - + Development in Java of a large & critical employee management system, used by hundreds of employees.
  - + Experience in writing a large client / server system using RMI, encryption (SSL), secure authentication (certificate keypairs), SQL Database backend, and a Swing based GUI.
  - + Software support (Unix administration) for Computer Science faculty, staff, and students.
- \* **Software Engineer Intern** Cisco Systems, San Jose, CA (Summer, 2000)
  - + Operating Systems programming.
  - + In charge of maintaining Calltracker, a subsystem of Cisco's Router Operating System (IOS).
  - + Training in Cisco router configuration and the IOS architecture.
- \* **Research Assistant** Ohio State University - CIS Software Engineering Group, (June 1998 - June 2000)
  - + Part of the research team developing a research compiler for a Java-like language.
  - + Part of a team developing Aristotle, a large program analysis system for C and Java.
  - + Research in analysis of C source code for memory allocation: Developed an algorithm for computing dynamic points-to relations; Designed and implemented a system for white box testing (coverage analysis) and debugging using dynamic pointer relations.
  - + Research in methods for detecting memory leaks and memory access errors.
  - + Implemented an experiment exploring reduction of pointers and copying in C++.
- \* **Grader** Ohio State University - CIS Software Component Engineering Course Sequence (Spring 1998)
  - + Grading programming labs and tutoring students in C++.
- \* **Computer Camp Counselor** YMCA Computer Camp, Youngstown Ohio (Summers 1997, 1998, 1999)
  - + Taught C++, Pascal, Logo, Linux, and Windows to children.

## Education:

- \* The Ohio State University, Columbus, OH
  - + B.S. in Computer Science, June 2002
  - + Overall G.P.A.: 3.37, (4.0 scale)
  - + Worked throughout college as a Software Engineer to pay for school.

## Coursework:

- \* Programming Languages, Networking, Object Oriented component design, Systems Programming, Computational Numerical Methods, Artificial Intelligence, C++, Lisp, and functional programming, Software Engineering, Software Design (spiral model, revision control, documentation, etc.)

## Organizations, Activities & Interests:

- \* Active in development for free software systems such as GNU/Linux
- \* President and founder of the Ohio State Open Source Software Development club: Apache Web server administration; Coordinating software projects; Managing a code repository; Public speaking
- \* Studying the viola in classical music performance (OSU Symphony Orchestra).
- \* Training horses in English show riding.