

Alain J. Roy

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EDUCATION

- Ph.D. University of Chicago, Computer Science. August, 2001.
Dissertation: *End-to-End Quality of Service for High-End Applications*.
- M.S. University of Chicago, Computer Science, March 1997.
- B.S. University of Chicago, Mathematics, June 1994.

RESEARCH AND DEVELOPMENT EXPERIENCE

Associate Researcher, 2001-Present

Condor Project, Department of Computer Sciences, University of Wisconsin-Madison

- Designed and implemented packaging strategy for a grid software toolkit (VDT). This included hiring and managing a team of developers, interacting with collaborators, working with scripting languages (Perl, Bourne shell), using CVS, and maintaining a web site.

<http://www.cs.wisc.edu/vdt>

- Collaborated with scientists and developers to design and develop grid computing solutions.
- Co-Principal Investigator on two National Science Foundation grants:

SCI: NMI DEPLOYMENT(ENG) nanoHUB

<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0438246>

(My name is not listed as a PI because it is a sub-contract)

Rapid-Response Adaptive Computing Environment for LHC Physics Analysis

<http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0427113>

- Took over development and design of the C++ ClassAd library, used for matchmaking.

<http://www.cs.wisc.edu/condor/classad>

- Guided students doing a variety of research, including a network storage appliance in C++.
- Wrote code in C++ and Perl for the Condor batch job processing software.
- Miscellaneous programming in C++ and Perl.
- Designed and developed alert system in C++ for finding problems in clusters and grids.

<http://www.cs.wisc.edu/condor/cluster/hawkeye>

- Wrote technical papers and documentation. Used LaTeX and HTML.
- Developed and presented numerous tutorials both nationally and internationally. Two examples:

http://www.cs.wisc.edu/~roy/effective_condorg/

http://www.cs.wisc.edu/condor/presentations/boulder_acm_2004/

- Reviewed papers for various conferences. On Program Committee for Workshop on Grids and Advanced Networks.

<http://perso.ens-lyon.fr/laurent.lefevre/gan05/>

- Participated in hiring new Condor staff

Graduate Student, 1994-2001

Department of Computer Science, University of Chicago

- Developed and implemented system in C on Linux for providing Quality of Service.
- Developed Quality of Service mechanisms, particularly for IP networks. Used C on Linux, differentiated services, RSVP, and Cisco 7505 routers.
- Investigated natural language communication with robots.
- Implemented simulator for robot-human interactions in C++ on the Macintosh.
- Published several conference and journal papers.
<http://www.cs.wisc.edu/~roy/publications/>

TEACHING EXPERIENCE

Instructor, Spring 2001

Department of Computer Science, University of Chicago

- Taught “Computer Networking”, March-June 2001 in Masters degree program.
- Developed lectures, homework, and exams.

Teaching Assistant, Fall 1997-1999

Departments of Computer Science, Northwestern University and University of Chicago

- Developed and graded homework and exams.
- Tutored students individually and in groups.

PROGRAMMING EXPERIENCE

Programmer, Studio Aslag, 1999

Developed innovative program to create doctors’ on-call schedules in C++ for the Macintosh.

Programmer, Paranoid Productions, 1996-1997

Assisted development of a commercial video game, *Damage Inc*, in C++ for the Macintosh.

Consultant to Bungie Software, 1996

Developed graphic utility for development of a video game, *Myth*, in C++ for the Macintosh.

Programmer, University of Chicago, Linguistics Department, 1995-1996

Sole programmer for interactive teaching program for Mayan Language in C++ for the Macintosh.

Programmer, Bungie Software, 1994

Assisted development of a commercial video game, *Marathon*, in C for the Macintosh.

COMPUTER SKILLS

Proficient Unix and Macintosh (pre-OS X) programmer.

Proficient with C, C++, Unix (Linux and others).

Comfortable with Perl, Bourne Shell scripts, Lisp, HTML, CSS, Windows, MacOS, and LaTeX.

Acquainted with Java, Python, Assembly.

ACTIVITIES

Hobbyist magician and juggler.