

**GEOFFREY S. KNAUTH**  
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**Summary:** Builder of innovative interactive software systems that please users and solve problems in new ways. Twenty-year contributor to GNU. **Interests:** Optimization problems. Identifying successful economic models for free software.

## PUBLIC DISCOURSE

- Free Software Foundation**, Boston, MA 1998–current  
*Treasurer, Board Member*
- PittJUG Java Code Camp** Pittsburgh, PA 10/06  
Speaker. *Using JScheme and OpenMap in a Civil Air Patrol Lost Aircraft Search*
- LL3 & LL4 Lightweight Languages Workshops at MIT**, Cambridge, MA 9/03–11/04  
*Member, Program Committee*
- PyCon DC 2003**, Washington, DC 3/03  
Speaker. *Lessons Learned in Converting a Large C Program into Manageable Python Modules*
- JavaOne 2002**, San Francisco, CA 3/02  
Speaker. *ICIS: Redeploying a Military Logistics System to the Web*
- Free Software Conference**, Moscow, Russia 4/93  
*American Co-Chair*
- Arndt & Arndt**, Washington, DC 5/87–6/87  
*Russian-English Interpreter*
- Exhibited American furniture and answered questions about life in America to half of 250,000 visitors to United States pavilion at Stroyindustriya-87 trade show, Moscow, USSR.
- Mystic Seaport Museum**, Mystic, CT Summers 1977, 1978, 1980  
*Planetarium Lecturer*

## PROFESSIONAL EXPERIENCE

† **Skills:** C/C++, Java, Perl, Scheme/JScheme, Lisp, Python, Ruby, Javascript, Objective-C, Smalltalk, Squeak, T<sub>E</sub>X. Oracle, PostgreSQL, MySQL. XML, Web/CGI. GNU/Linux, Mac OS X, Solaris, WinXP.

- Lycoming College** Williamsport, PA 8/06–current  
*Computer Science Instructor*
- Introduction to Computer Science
  - Computer Organization / Machine Language
  - Robotics (*Spring*)
- Contracting** Boston and Washington 2006  
*Senior Software Engineer*
- Optimization of GNU Octave performance for parallel supercomputing
  - Implementation of Web Services for philanthropic funding database
- SFA, Inc.**, Virginia Beach, VA 1/04–2/06  
*Senior Software Engineer*
- Transferred knowledge of legacy military logistics application code and business rules to comply with directive to recode in Java and Oracle.

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† Years with each language and system are listed on the last page.

**Résumé of GEOFFREY S. KNAUTH**  
PROFESSIONAL EXPERIENCE (*cont'd*)

- BAE Systems**, Rockville, MD 5/02–12/03  
*Systems Analyst*
- Continued development of web-based military logistics system originally built at BBN.
  - Reworked architecture to comply with latest DoD security requirements.
- BBN Technologies, Distributed Systems & Logistics, Verizon**, Cambridge, MA 10/95–5/02  
*Senior Systems Engineer (Band 2L)*
- Developed fast web-based military logistics system that saved U.S. Government \$12.7 million and reduced processing from 3–4 months to 5–10 minutes, using C/C++, Perl, Java, Scheme and Oracle.
  - Adapted DARPA Cougaar intelligent agents to simulate fine-grained Bulk Fuels logistics problems.
  - Helped launch successful advertising technology spinoff, Unicast Communications.
- Marble Associates, Inc.**, Waltham, MA 12/91–9/95  
*Senior Associate*
- Developed globally distributed Wall Street emerging markets trading system.
  - Wrote ParcPlace and Digitalk Smalltalk applications for two Fortune 100 clients.
  - Converted financial aid mainframe system to client/server technology and Sybase.
  - Made database-building compiler enhancements to speed understanding of large software projects.
  - Developed API for DecisionBuilder™, a Bayesian analysis tool with superior graphics and algorithms.
  - Made kernel module enhancements for Teleconnect™ SLIP connectivity software.
- Camex/DuPont Printing & Publishing**, Boston, MA 11/87–11/91  
*Senior Programmer*
- Source code “owner” of Sun-based flagship Breeze product, a display ad graphic workstation used to assemble pages for large metropolitan newspapers. Supervised work of 15 developers.
  - Internationalized the Breeze product, which held 75% foreign market share.
- Envoy Systems Corp.**, Waltham, MA 12/86–11/87  
*Programmer*
- Developed pioneering salesforce automation applications for Fortune 500 clients, distributing sales and inventory information from Oracle databases on corporate minicomputers to the first laptops.
- Independent Software Developer and Contractor**, Cambridge, MA 1/86–12/86
- WX Ltd., Jericho, VT. Wrote satellite weather data acquisition and analysis applications on IBM PC-ATs running DOS and Xenix.
  - Garland Corp., Brockton, MA. Provided external code review. AT&T 3B2, Vax.
  - Houghton Mifflin Co., Boston, MA. Put Swedish language database on IBM PC-AT.
  - Harvard Graduate School of Education, Cambridge, MA. Administrative work on IBM PCs.
- Intentional Educations**, Watertown, MA 6/82–1/86  
*Systems Manager and Programmer*
- Coordinated technical efforts of educational software company. Maintained a CompuStar network, Macintosh and Apple II computers, wrote C interfaces to Varityper, supported courseware developers.
- Nicholson Yacht Charters**, Antigua, West Indies, and Cambridge, MA 1978–1984  
*Software Developer*
- Created accounting and scheduling applications for a yacht charter business, on the Sol 20, North Star Horizon, and IBM PCs. Volunteer pilot on search and rescue flights. Assisted French consul with translations and organized activities.

## Résumé of GEOFFREY S. KNAUTH (*cont'd*)

### EDUCATION

**Harvard Extension School**, Cambridge, MA 1987–1989, 2004–current  
Graduate courses in Computer Science, Artificial Intelligence, Advanced Computer Graphics, Electronic Publishing, German.

**Northeastern University**, Boston, MA 1986  
Graduate course in Unix Systems Programming.

**Harvard College '83, A.B.**, Cambridge, MA 9/79–8/85  
Concentration: Economics. Extensive coursework in Slavic Languages and Literatures. Varsity Letter, Men's Heavyweight Crew.

**Choate Rosemary Hall**, Wallingford, CT 1975–1978  
President Computer & Chess Clubs. Began programming in 1975. Russian prize. Crew Captain.

### AFFILIATIONS & INTERESTS

- Member ACM, IEEE, Usenix/Sage.
- Treasurer, Free Software Foundation, 1998–current. Co-founder, GNU Objective-C project.
- 1LT Civil Air Patrol, member AOPA. Instrument-rated private pilot. Began flying in 1978.
- Member Cambridge Boat Club, Central PA Rowing Club. Coxswain on 1989 & 1994 U.S. Rowing Teams. Trained with U.S. National Team 1988–95. Board of Directors, CRASH-B Sprints World Indoor Rowing Championships, 1984–current. Regatta Committee, Head-of-the-Charles™, 1993–95. Began rowing in 1974.
- Volunteer adult leader, Cub Scouts, Williamsport, PA, 2003–current.
- Volunteer rowing coach, Lycoming College, Williamsport, PA, 1999–2004.
- Volunteer rowing coach, Boston inner city youth program (Mandela Town Hall Health Spot), 1996.
- Volunteer tutor, Trinity After-School program, Williamsport, PA, 1999–2000, 2006.
- Volunteer reader, Recording for the Blind and Dyslexic, 1989–99.
- Fluent in Russian and French, some German.

### FAMILIARITY WITH TECHNOLOGY

PROGRAMMING LANGUAGES		
	Years	When
C	29	1977→
Perl	12	1994→
Java	11	1995→
various assembler	11	1975–1986
Javascript	10	1996→
C++	9	1997→
Scheme	7	1999→
Objective-C	7	1988–1995
Basic	7	1975–1982
T <sub>E</sub> X	3	1986→
Fortran	3	1975–1978
Smalltalk	> 2	1993–1994, 2004
Lisp	1	1980, 1988
Python	0.5	2003
Ruby	0.25	2004

SYSTEMS, as programmer		
	Years	When
Unix	28	1978→
Sun	19	1987→
Web/CGI	12	1994→
GNU/Linux	11	1995→
Oracle	10	1986, 1997→
Microsoft	10	1982→
NeXTstep	6	1988–1994
Mac OS X	4	2002→
MySQL	4	2002→
XML	4	2002→
J2EE	2	2004→
PostgreSQL	2	2004→
Early Mac	2	1984–1986

References available on request.

Updated: 16 October 2006