

Philip Nadeau (phil@phil.org)

Executive Summary: What I've Done and What I Do

- ◆ Perl and Linux Black Belt
- ◆ BSci (1997), MSci (In Progress)
- ◆ 13+ Years of Experience
- ◆ All Aspects of Development Cycle: Spec/ Design/ Code/ Test
- ◆ LAMP Web (Linux/ Apache/ MySQL/ Perl)
- ◆ UNIX/Linux System Administration
- ◆ Wired and Wireless Networks
- ◆ Embedded PCs and Device Drivers
- ◆ C/C++, Postgres, Java, Ruby, Ada Too

Research Interests

- ◆ Artificial Intelligence (AI, AGI, IA)
- ◆ Natural Language Processing (NLP)
- ◆ Information Retrieval and Extraction
- ◆ Machine Learning
- ◆ Evolutionary Computation
- ◆ Genetic Programming

Objective

Obtain employment as a software developer, preferably involving artificial intelligence, information retrieval, machine learning, or evolutionary computation.

Education

Masters of Science in Computer Science (*in progress, expected March, 2009*)

Western Washington University, Bellingham, WA

- ◆ Core graduate curriculum in automata theory, algorithm analysis, programming languages, operating systems, scientific research methodology.
- ◆ Specialization in Machine Learning, Information Extraction and Retrieval.
- ◆ Electives in Parallel Processing, Reconfigurable Computing, Embedded Systems.
- ◆ Master's project in self-improving message understanding systems, to perform knowledge base construction from a natural language corpus, est. finish 3/09.

Bachelor of Science in Computer Science (1997)

Stevens Institute of Technology, Hoboken, NJ

- ◆ Strong core science and engineering curriculum.
- ◆ Specialization in software engineering, UNIX development, algorithms.
- ◆ Electives in ethics, history of science, and philosophy.

Employment History

Graduate Assistant (Lab Instructor)

Computer Science Department, WWU, Bellingham, WA (AY 2007-2008)

Contact: Debra Jusak (Graduate Assistant Supervisor), debra.jusak@wwu.edu

- ◆ As sole instructor for an introductory programming laboratory using Ada 95, supervised and assisted 45+ students at a time (three sections of appx. 15 each)
- ◆ Expanded lab notes from one-page briefs to a full seven tutorials of five or more pages each, covering key concepts in imperative programming.

Contracting Developer

InternetIdentity.com, Tacoma, WA (2005-2007)

Contact: Rod Rasmussen (COO), rod.rasmussen@internetidentity.com

- ◆ Using LAMP (Linux, Apache, MySQL, Perl), designed and implemented 'Automated Domain Trust' (ADT) system for automated probing of WHOIS and DNS information (.com, .net, etc.) ADT inspected new thousands of web site registrations on a daily basis to screen for potential and actual cases of fraud.
- ◆ Automated white-box testing of ADT with Test::Simple and other Perl modules to simulate web, Whois, FTP, and DNS servers.
- ◆ Established baseline measurements for the 40 million domains in the GTLD's (the "Rate the World" project.)
- ◆ Implemented data exports per subscriber specifications, in a number of formats (XML/XSLT, CSV) and transports (FTP, SFTP, HTTPS)
- ◆ Other sysadmin and programming duties as assigned (mostly Perl, some Ruby.) Specific Perl libraries include HTML::Mason, Catalyst, CGI::Application, XML::Simple, DBI, DBD::mysql, Class::DBI, YAML.

Systems Engineer

Innercite.com (now IC-Wireless), El Dorado Hills, CA (2003-2005)

Contact: Justin Balog (Computer Services Manager), justin@balogworld.com

- ◆ Sole full-time Linux and Perl expert for an Internet Service Provider with 5000+ users, with duties split 50/50 between sysadmin duties and Perl development, particularly of legacy LAMP-based CRM/provisioning system. Specific Perl libraries include CGI, HTML::Mason, Maypole, DBI, Class::DBI, DBD::mysql.
- ◆ Provisioned and maintained dial-up (RADIUS), DSL (Redback), wireless (802.11), web hosting (Cobalt Raq), DNS (BIND), email (UW/IMAP, Sendmail) co-location, and other services.
- ◆ Maintained home-grown Linux-on-Soekris (a type of embedded PC) 'Swiss Army Knife' wired and wireless customer premises devices.
- ◆ Integrated a >98% effective anti-spam system into thousands of legacy mailboxes using a Barracuda appliance, OpenLDAP, Sendmail, and UW/IMAP.
- ◆ As a member of a team of three, analyzed and maintained (both in the frame room and in the field) an IP network (AS 33445) with multiple DS3 peers, a Class B IP allocation, a redundant wireless backbone of 801.11b bridges, Cisco IOS-based routers, and Catalyst VLAN switches (also 3com Superstacks.)

Sysadmin and Embedded Linux Developer

Ebox.com, Toronto, Ontario, Canada (2001-2003)

Contact: David Edward Cramer (CTO), davec@fastcrypt.com

- ◆ Provided 24/7 monitoring and uptime for growing logistics firm.
- ◆ Administered Linux-based server systems, including web and email servers, Java servlet containers, Postgres databases, firewalls, IPsec VPNs, and print servers.
- ◆ Prototyped software for in-vehicle logistics terminal, based on a Single Board PC, with Linux OS, Java runtime support, GPS logging, ARC navigation data, LF RFID tracking, and wireless Internet over the Motorola iDEN network.

Project Manager

Flexis.net (formerly y-DNA Incorporated), Palo Alto, CA (1998-2001)

Contact: Andreas Kogelnik, MD (CEO), andy@flexis.net

- ◆ Principal developer for MedWebPlus.com (MWP), a semantic information retrieval system based on the Unified Medical Language System (UMLS) lexicon.
- ◆ Implemented the 'YBase Informatics Engine', a LAMP (Perl, also HTML::Mason, Net::HTTP and Pg.pm) and Postgres-based web applications platform. YBase can either run under CGI, FastCGI, or in standalone HTTP and HTTP/S modes. YBase is still in current use at Flexis.

Consulting Partner

Big Panda House Consulting, Fort Lee, NJ (1996-1998)

Contact: Richard Hwang (Partner), rhwang@bigpanda.com

- ◆ Junior partner with responsibilities in all aspects of consulting operation.
- ◆ Implemented e-commerce and sysadmin tools in Javascript and Perl.
- ◆ Continued machine vision and data visualization contract with Bell Labs.
- ◆ Developed business cases for BRUIN wearable computer system and ARIZONA space combat game.

Machine Vision Programming Consultant

Bell Laboratories, Holmdel, NJ (1995-1996)

Contact: Jakub Segen (Member of Technical Staff), seggen@ieee.org

- ◆ Under supervision of experts in machine vision, implemented experimental real-time gesture recognition system in C on SGI platform using SGI/VL.
- ◆ Also implement OpenGL programs for pose visualization, and TCL/Tk scripts for visual parameter tuning tools.

Multiplayer Server Programmer

Cyber Warrior Inc., Fair Lawn, NJ (1994-1995)

- ◆ As a member of a team, implemented MMORPG engine in LambdaMOO.
- ◆ Assembled dial-up terminal system and Internet connectivity for game transport.

Other Technical Specialties

FreeBSD, NetBSD, and Windows XP device driver implementation. Amateur radio license N1ZUG. Some familiarity with fixed-wing general aviation.

Supporting Documentation

- <http://www.phil.org/resume.pdf>
- <http://www.phil.org/karr/>

(The remaining documents are academic works in progress. Please do not distribute except for purposes of evaluating suitability of the candidate for employment.)

- <http://www.phil.org/cs141/>
- <http://www.phil.org/cs601proposal.pdf>
- <http://www.phil.org/cs601progress1.pdf>