

Gregory Martin Pfeil

520 Boylston Ave E
Apt 403
Seattle, WA 98102

+1 206 399-3461
greg@technomadic.org
http://technomadic.org/greg/

SOFTWARE ENGINEER

oo architecture & design • machine learning • information design • agile development

Energetic, enthusiastic, and capable of providing the quality implied by the title of engineer, I am knowledgeable in language design and able to utilize any language at an intermediate level in a week's time. The *craft* of software is of utmost importance – creating applications worthy of pride. I am determined and take great pleasure in my work – a strong and flexible part of any team, willing to take on less glamorous work to make sure the end result is of the highest possible quality.

PROGRAMMING EXPERIENCE

Software Development Engineer 2 – Amazon.com (Sep. 2004–present)

- conceived, designed, and developed a **declarative logic** system written in **Common Lisp** to simplify Website features while improving parallelism and general performance;
- revamped a C++ content-scheduling system to add a **feedback-based learning** component, and to make it modular so third-parties could schedule new content;
- performed *Weblab* experiments, acting as analyst in interpreting the data;
- personally responsible for millions of dollars in gross profit (as measured by Amazon's *Weblab* system);
- spearheaded skunkworks effort to support **Lisp** development; and
- wrote a generic structured-data retrieval service in C++ to replace parsing of BDB values on the Web servers.

Founder, Partner – Valent Solutions Inc. (Dec. 2002–Jul. 2004)

- custom application development for clients in disparate domains;
- explored various languages and APIs in projects for different clients;
- managed projects of varying scale in C++, **Java**, and other languages;
- performed research to further develop programming and process skills;
- continued to develop and maintain previous projects on contract; and
- managed customer expectations and project time lines.

Senior Software Engineer – XML Global Research (Nov. 1999–Dec. 2002)

- developed an ebXML Messaging engine;
- designed and developed a tracking system for stolen property in **Java**, used by a number of police forces, including the Vancouver Police Dept.;
- was brought in to assist on a native **XML** database written in **Java**; and
- designed and developed an **XML**-based context-sensitive **search engine**, prototyped in **Perl**, and productionized in C++; and
- worked extensively with **XML** technologies, including XSL, XML Schema, SOAP, SAX, and DOM.

ADMINISTRATIVE EXPERIENCE

Network Technician, Technology Manager – JMU (Sep. 1997–Nov. 1999)

- system administrator for office of 30+ computer systems;
- acted as liaison between print and Web editions of the student newspaper;
- provided telephone and on-site computer support for university residents;
- moved services from Mac OS to Linux, automating large parts of a previously manual process;
- supervised Webmaster, Online Editor, and team of volunteers; and
- trained new Resident Network Assistants.

Additional Languages

Haskell, Erlang, Smalltalk, Ruby, Objective-C, Python, JavaScript, bash, SQL

Environments & Tools

- Emacs, Eclipse, Vim, Xcode, Ant, make
- Mac OS X, Linux, Unix, Windows 2000

Personal Accomplishments

- wrote a **Common Lisp** sparklines library with slope normalization;
- developed a **CL** extension for mathematics including quaternions, octonions, and interval arithmetic;
- wrote a low-level audio API for **Eiffel**;
- developing a programming language to better understand concepts and implementation issues;
- participating in the Open Source community as a programmer on multiple projects; and
- spent two years as a freelance **Perl** programmer.

Wearable Computers

- domain expert – NASA's Error Proof Flight Deck
- designer – personal wearable computer
- proponent, moderator – comp.sys.wearables newsgroup
- maintainer – Wearable Computing FAQ

EDUCATION

James Madison University (Aug. 1996–Nov. 1999)

- studied Music Composition and Computer Science
- courses in LAN, WAN, and network/distributed application development
- courses in speech communication and technical & scientific communication
- taught programming (**Perl**, CGI) workshops in the Computer Science department
- member – Mensa
- brother – ΑΦΩ, national service fraternity