

Sam Stuewe

Lead Developer and Senior Software Engineer

Leadership Experience

- 2014–Present **Software Development and Technical Support Manager**, *AbleNet, Inc.*, Roseville, MN.
- Guide and Manage development of software projects
 - Installed more than 10 Windows installs for use by company personelle
 - Interview, hire and manage software and web developers
 - Develop and maintain various software projects for the company
 - Provide daily desktop support for 30 on-site and 10 remote staff
 - Serve as the primary point of contact for all IT issues
 - Provide general technical advice to all members of the staff and administration
 - Support several thousand users in their use of software to aid those living with disabilities
 - Conducted formal code reviews
- 2015–Present **Volunteer Teacher and Mentor**, *ArchLinux Classroom*, Remote, Online.
- Taught a class introducing static typing to 60 students
 - Mentored several students learning C

Communication Skills

- 2015–Present Writing documentation, and programming style guides
- 2014 Public Presentation and Defense of Thesis
- 2012–2013 Political Campaign Literature Creation

Computer Skills

Programming Language Experience

- Advanced **iso C (C99 and C11) and C++ (C++98).**
- Maintained, updated and pushed one major release and one minor release of a legacy code-base (consisting of over 1.1 million lines of C and C++) assisting in a complete graphical overhaul and spearheading several major bugfix efforts
 - Worked with the gamut of standard headers, libraries and (ISO C compatible) compiler features of both the GNU C Compiler (gcc) and LLVM's clang
 - Additionally worked with a wide set of external libraries including jansson (json parsing), curl (web interaction), xml (xml parsing), ncurses (text-based UIs), math (standard arithmetic)
 - Developed and maintained a powerful command-line interface program to interact with a versatile pastebin, which is now officially redistributed by ArchLinux (a major linux distribution)
 - Developed and maintained a binary, library and extensible API (heavily integrated with upstream APIs) to fetch weather data for use by both end users and fellow developers
 - Developed and maintained a watchface for the Pebble Time smartwatch
 - Created various utilities integrating with upstream APIs for random number generation, checking website status, fetching external IP addresses and URL shortening among others
 - Formally educated at Macalester College in low-level systems, distributed and parallel programming

- Advanced **Haskell (Haskell2010).**
- Developed and deployed a web application for easy online assessment scoring for use by more than 2000 users
 - Worked with a dramatically large set of libraries ranging from the base module to various external modules for tasks ranging from serving web pages to interacting with SQLite databases to exporting documents in various formats
 - Created a variety of small utilities for personal use including for system status monitoring and special-case text formatting
 - Deployed and continued to maintain a sleek, personal website
- Advanced **Lua.**
- Created various small utilities and libraries for working with a variety of fundamental and higher-level data structures
 - Reimplemented basic Object Oriented design
 - Worked on projects with Terra (the statically-typed LLVM-based cousin of Lua) and Löve2D
- Advanced **Java (JDK6).**
- Formally educated at Macalester College including a full in-depth overview of the language (including data structures, error/exception handling, Object Oriented and graphical design)
 - Reimplemented many fundamental data structures (e.g., maps, trees, stacks, queues, dictionaries, lists (single and doubly-linked))
 - Created many simple fully graphical projects including a clone of Conway's *Game of Life*, a slot machine and a *Breakout* clone
- Advanced **Web Languages (HTML5, JS and CSS3) and Markup.**
- Deployed an interactive web application (using a subset of HTML5, JS and CSS3 in an attempt to be as widely compatible as possible) that worked with a wide variety of markup languages including Restructured Text, Markdown and L^AT_EX
 - Designed and tested sites for standards compliance, performance, security and accessibility
 - Aided a Macalester professor in creating his own website (with HTML5 and CSS3)
- Intermediate **Agda.**
- Wrote literate programs to make human-readable documentation integrated with machine-code
 - Explored Agda's unique safety guarantees as a Dependently Typed, theorem-proving language
- Intermediate **Python (2.x and 3.x) and R.**
- Implemented basic applications for common personal use (e.g., a contact book)
 - Wrote several statistical and data analysis scripts for classes at Macalester College
 - Completed a statistics course at Macalester College that included an overview of R
 - Took a summer-long independent study with a professor at Kansas State University, Salina to become proficient with Python
- Operating Systems**
- Advanced **GNU/Linux.**
- Several years of systems administration for production, testing and personal servers and workstations
 - Familiarity with both manual and automated deployment of Linux virtual machines, desktops and servers (rackmount and tower formfactor)
 - Over a year of production maintenance with several distros hosting company infrastructural and user-facing content web services
 - Daily personal use and system administration for the last twelve years
 - Deep familiarity with the file system hierarchy, os organization and system calls
- Advanced **Microsoft Windows.**
- Daily support of end users on Windows using various programs for over a year
 - Over a year of software development and maintenance for a program targeting Windows
 - System and network administration of production, testing and personal servers and workstations for several years

- Advanced **OSX.**
- Daily support of end users on OSX using various programs for over a year
 - Over a year of software development and maintenance for a program targeting OSX

- Basic **BSD (“Net” and “Free”).**
- Limited experience with “Ports” and BSD installation, configuration and usage

General Computing

- Advanced **Digital Media.**
- Used Inkscape (a vector editor) to create icons for production webapps
 - Recorded demonstrational videos with FFmpeg for use by customers and training sessions

- Advanced **Document Layout.**
- Use of RestructuredText and \LaTeX to create formal project specifications
 - Use of web languages for constructing production user interfaces

Interests

- Computers
- Bipartisan Dialogue
- Computational, Political and other Bodies of Theory
- Free and Libre Open-Source Software
- Typesetting, Document Publishing and typography
- Graphical Design

Education

- 2010–2014 **Bachelor of Arts, Macalester College, GPA – 3.65.**
Cum Laude and Departmental Honors in Political Science
- Spring 2013 **International Exchange, L’institut d’études politiques de Paris, GPA – 4.0.**

Bachelor’s Honor Thesis

- Title *On the Nature of Political Interaction as Conversation*
- Supervisors Professors David Blaney, Andrew Latham and Terry Boychuk
- Description This thesis synthesized a new framework for analyzing political interaction using an accessible and extensible metaphor

Languages

- English **Native Speaker**
- French **Intermediate** *Fluent in Writing*

Awards

- 2014 Member and Organizer for ΠΣΑ, National Political Honors Fraternity