

WHO: Stephen Hawley
WHAT: Senior Software Architect
WHERE: 92 Moser St
Northampton, MA 01062
1-413-695-7446 email: hawley@plinth.org

WHY: I come up to speed quickly on large projects and follow them through to completion. I design code that is meant to be solid throughout its lifetime, with the appropriate balance of speed, size, portability, abstraction, and deadline. I debug well at both high and low-levels. I have shipped products on time written in C, C++, C#, F#, and Java.

2004-Present Atalasoftware, Inc.  Chief Software Architect

Responsible for the DotImage, JoltImage, DotPdf, and JoltPdf product lines, a set of libraries for document image processing.

Designed all image processing architecture, wrote image codecs, wrote a top quality PDF library, maintained code and ports in multiple languages, planned feature roadmap, presented at technical conferences, worked trade shows, mentored coworkers, worked with tech support to help customers, built a positive engineering and corporate culture.

2001-2004 Hatfield Public Schools  Director of Technology

Ran all IT and related computer support functions for two schools, taught several classes, aided staff and faculty.

1999-2001 Presto Technologies  Senior Software Architect

Designed and wrote a portable device abstraction framework for plug-and-play devices, geared towards self-identifying devices such as RFID, magstripe, or barcode scanners. Included high level event pipeline that was used to perform online transactions for eCommerce purchases. Initial target was an RFID eWallet.

1998-1999 Plinth Consulting  Founder

Founded and ran a firm to provide software consulting. Clients included Adobe Systems and Digital Video Arts.

1996-1998 Newfire Incorporated  Bit Banger

Part of a team that build a high-performance VRML engine targeted at games. Responsibilities included the VRML scripting nodes, designed and implemented C/C++ and Java interfaces to the VRML engine as well as a single and multiplayer network game framework. Designed an AI programming language based on state machines and a JIT compiler for its code.

1992-1996 Adobe Systems, Application Division  Computer Scientist

Designed a cross-platform porting strategy for Adobe Premiere, which included an abstract UI framework. Ported Acrobat Catalog to the Mac. Designed and wrote the Search plug-in for the Mac. Co-wrote web links for Acrobat. Wrote Speakrobat, an Acrobat plug-in for reading documents aloud. Wrote SteveApp, a light-weight application framework for rapid development on the Mac which was used for Catalog as well as for the Acrobat Search plug-in. Wrote a Named Query plug-in for Acrobat. Prototyped the Acrobat plug-in model. Brought Acrobat 1.0,

2.0 and 3.0 to market.

1990-1992 Adobe Systems, Printer Division 🎨 Computer Scientist

Shipped 7 PostScript printer products. Bootstrapped low-level monitors. Brought up and debugged real-time OS'es. Wrote drivers for print engines, front panels and I/O devices. Worked with OEMs to design and implement product-specific features.

1984-1990 Bell Communications Research 🎨 Intern/Contractor

Wrote a suite of image-processing programs for preparing documents for OCR. Wrote a Mac GUI for Superbook, a search engine and on-line text retrieval system. Wrote a complete UI widget library for the MGR window manager. Wrote a UI for an experimental phone system. Wrote a neural network display program. Ported the MGR window manager from Sun to Mac.

1982-1984 AT&T Bell Laboratories 🎨 Instrument Builder

Built electronic violins designed by Max Mathews. The instruments electronically altered the sound to provide quality equivalent to very fine traditional instruments. Produced drawings of all parts and assembly diagrams. Laurie Anderson and Al Aho each own one of my instruments.

Education: 1989 BA in Computer Science, Oberlin College

Related Experience

Languages

Fluent in: C, C++, Java, C#, Pascal
Conversant in: F#, Scala, FORTH, PostScript, Scheme, JavaScript
Familiar with: Python, Ruby, LISP, VB.NET

CPUs

IL, JVM, x86, 68K, PPC, NS32000, VAX, 6809, 6800, 6502

- > 29k reputation on stack overflow (<http://stackoverflow.com/users/20481/plinth>)
- Wrote interpreters for PostScript, LISP, FORTH, 6800, 6809, 6502, 8080.
- Writing a multi-arcade machine emulator in C#
- Implemented the MIDI spec in Java, including device abstractions.
- Built several pieces of furniture from scratch
- Restore vintage video games
- Run the Falmouth Road Race twice for charity
- Wrote XBurrito, a Motif-based GUI for ordering food from a taqueria via fax.
- Wrote MacBurrito, an innovative approach to CABO (Computer-Aided Burrito Ordering). It features a virtual tortilla and a drag-and-drop interface for specifying your order.
- Reverse-engineered the commercial arcade game Robotron, producing a commented disassembly of the ROMs and a high-level model of the game's operation.
- Published two arcade games for the Apple II series of computers while in high school.
- Played trumpet for over 29 years as well as several other musical instruments.