

Patrick T Anderson Senior Software Engineer

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Objectives

Use symmetry and implicit patterns to enforce clear resource contracts.
Minimize code size and complexity. Eliminate redundance. Orthogonalize.
Use pass-through design to simplify automation and reduce maintenance.
Create tools to let users easily make and alter the software they want.

Timeline

May/2016 - Mar/2018 Sling TV

Redesign, rewrite and repair the core of in-house C++/lua video player.
Triage and repair problems with threading, resource locking, scheduling.
Create and manage Jenkins jobs to automate the build and run some tests.

Dec/2013 - Nov/2015 RackWare

Extend, solidify and simplify file-based imaging suite using C++, Batch, Bash.
Script the build, package, verify, install, test and report using git, Jenkins.
Automate VM lifecycle management on vSphere, KVM, XEN through virsh and others.

Oct/2008 - Oct/2013 StorageCraft

Write caching VHD and VHDX plugins in Object-Oriented-C on Windows, Linux, OS X.
Extend cross-platform, block-based imaging suite using Emacs Lisp, OO-C and C++.
Integrate VMware VDDK libraries for VMDK and ESXi targets using C++ and REST.
Write skeleton snapshot driver for HFS+ on Mac OS X using C and Xcode.
Automate build system to compile, sign, package, verify and report.
Develop simple C++ framework to overcome Windows installer limitations.

Aug/2005 - Oct/2008 Social Sufficiency Coalition [Sole Proprietor]

Begin basic Linux and Android development.
Write autolink "pass through" static website generator 'lens.el' with XHTML and CSS.
Use this tool to enforce strict term definitions for comparison of economic models.
Define new Mode of Production implemented through Intra Owner Trade Agreement (IOTA).

Aug/2000-Aug/2005 Altiris

Write thin C++ library to automate resource management and simplify Win32 API.
Increase performance and decrease maintenance using "pass through" interfaces.
Extend, debug and repair Windows device drivers to read/write hardware settings.
Write W32 Service remotely control and report computer settings.
Write simple HTTP and IMAP clients to send commands, and parse results.
Write self-extracting installer conforming to "Add/Remove Programs" guidelines.
Write dynamic virtual file system for incremental backup to removable media.
Write some simple stored procedures against MSSQL.

Aug/1999-Aug/2000 NovaRad

Integrate DICOM transport and JPEG2k compression into C++ medical imaging client.
Design predictive caching SCSI robotic tape archiver and begin C implementation.

Jul/1997-Aug/1999 NetSchools

Develop UDP/IP packet generator and simple sniffer for IR network.
Develop network logon provider in C using SSPI and Blowfish encryption.
Help develop write-protection for Windows 9x filesystem and registry.
Extend compressing RAM paging driver and keyboard filter VxD using MS DDK.

Jun/1996-Jun/1997 BioVision Motion Capture

Develop parsers and C++ glue code to import motion capture data.
Develop other tools to simplify and automate motion data transforms.
Use matrix mathematics and spline approximations to smooth sparse data.

Feb/1996-Jul/1996 IBM Eduquest

Track and fix application bugs in C++ educational software.
Help write printer driver to translate between Postscript, PCL, PDDP.

Education**Jan/1995-Dec/1998 Brigham Young University**

B.S. in Computer Science 3.6 GPA
Teacher's Aid for "Discrete Structures and Combinatorial Mathematics" I and II
Independent C/C++ tutor