Patrick T Anderson

Senior Software Engineer

[Patrick-T-Anderson.github.io](http://Patrick-T-Anderson.github.io/)

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*What I do:*

Design orthoganl, pass-through APIs to scale complexity as needed.

Use tricks of the trade to spelunk, debug and simplify old code.

*What I did:*

**President: Product Futures Foundation Apr/2018 - Present**

Write the LENS contract language for human-readable smart contracts.

Design Earth Change DAO to sell future products and procure sources.

Develop For Product model to align shareholder and customer goals.

**Senior Software Engineer:** [**SlingTV.com**](http://SlingTV.com/) **May/2016 - Mar/2018**

Repair, redesign and rewrite the core of in-house C++/lua video player.

Triage and resolve issues with threading, resource locking, scheduling.

Build, pack, test Android, Roku, iOS, tvOS with BASH, Python, git, Jenkins.

**Senior Software Engineer:** [**RackWareInc.com**](http://RackWareInc.com/) **Dec/2013 - Nov/2015**

Simplify and extend their file-based imaging suite using C++, BASH, Batch.

Build, package, test, verify and report using BASH, Python, git, Jenkins.

Automate VM management for AWS, IBM Cloud, vSphere, KVM, XEN, VirtualBox.

**Software Engineer IV:** [**StorageCraft.com**](http://StorageCraft.com/) **Oct/2008 - Oct/2013**

Extend block-based imaging suite using cross-platform OO-C and C++.

Write plugins to read/write VHD and VHDX for Windows, Linux, macOS.

Integrate VMware VDDK libraries for VMDK and ESXi targets over REST.

Automate build system to compile, sign, package, verify and report.

Write skeleton snapshot driver for HFS+ on macOS using C and Xcode.

**Founder:** [**SocialSufficiencyCoalition.BlogSpot.com**](http://SocialSufficiencyCoalition.BlogSpot.com/) **Aug/2005 - Oct/2008**

Start GNUnix as a GNU+Linux distro and begin basic Linux programming.

Write autolink static website generator with Emacs Lisp, XHTML and CSS.

Write Intra Owner Trade Agreement as property contract for social goals.

**Software Engineer III:** [**Altiris.com**](http://Altiris.com/) **(now Symantec) Aug/2000 - Aug/2005**

Write thin C++ library to automate resource management and simplify the API.

Write Win32 Service to allow remote administration of any Windows client.

Debug, repair and extend Windows drivers to read and write hardware settings.

Write dynamic virtual file system for incremental backup to removable media.

**Software Engineer II:** [**NovaRad.net**](http://NovaRad.net/) **Aug/1999 - Aug/2000**

Integrate DICOM transport and JPEG2k compression into C++ medical imaging client.

Design predictive caching SCSI robotic tape archiver and begin C implementation.

**Software Engineer:** [**NetSchools.in**](http://NetSchools.in/) **Jul/1997 - Aug/1999**

Develop UDP/IP packet generator and simple sniffer for IR network.

Develop Windows logon provider in C using SSPI and Blowfish encryption.

Help develop write-protection for Windows 9x filesystem and registry.

Extend RAM paging driver and keyboard filter driver using MS WDK.

**Software Engineer: BioVision Motion Capture Jun/1996 - Jun/1997**

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.

**Software Tester: IBM Eduquest** [**IBM.com**](http://IBM.com/) **Feb/1996 - Jul/1996**

Track and fix application bugs in C++ educational software.

Help write code to translate between Postscript, PCL, PDDP.

**Bachelor of Science in CS: Brigham Young University** [**BYU.edu**](http://BYU.edu/) **Jan/1995 - Dec/1998**

**Teacher's Aid**: "Discrete Structures and Combinatorial Mathematics" I and II

**Independent tutor**: C and C++