Paul Jones - Software Engineer

West Chester, PA

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Education

Lehigh University Bethlehem, Pennsylvania *B.S Business Economics 2010*

Programming Languages C, C++, C#, Java, Python, Rust, Shell

Serverside nginx, apache, lxc, docker, ansible, terraform (AWS), lambda (AWS), elastic beanstalk (AWS)

Operating Systems Unix, Windows, MVS, AWS

Linux Power User

- Minimalist CLI based workflow following Unix Philosophy for maximum productivity (vim, tmux)
- Uses and contributes to minimalist source based distribution (venomlinux)
- VenomLinux is simply Linux From Scratch (LFS) with a basic shell based package manager
- Simple tasks should be written in bash, programs written in C
- Contributes to open source projects (mutt, venomlinux)

Home Server Admin

- Admins Containerized software on home server using lxc and ansible
- Sites and software include personal webpage, nextcloud and gitlab instances
- Self hosted Email
- Accessible for friends and family
- Runs homemade linux router using iptables and dnsmasq
- Setup with the goal of complete data freedom from Apple and Google
- Host F1 results datbase on an installation of MVS on the Hercules IBM Mainframe emulator

Projects

In the digital form of this document, each project header is a link to more information.

Venom Linux

Frequent contributor to power user focused source based distro based on Linux From Scratch with a minimalist package manager in POSIX compliant shell.

Ethernet Nintendo

Engineered an arduino based expansion board which uses the expansion port of the original NES to provide multiplayer over the internet.

Monocoque

A cross platform device manager for simulators that can drive simulator hardware devices such as Tachometers, haptic shakers, and custom arduino devices, written in C.

Linux Kernel Patch

Patch for usb-pid electric motor driver for force feedback wheels (Direct Drive Wheels) used in driving simulators

BoomerCMS

A static web page content management system with few dependencies written in POSIX compliant shell.

Stock Market Algorithms

Developed and backtested stock market algorithms (with moderate success) using python zipline framework

Experience

Calcfocus Philadelphia, PA
Developer: November 2020 - Present

- Performs AWS administration with various AWS services such as Lambda, Elastic Beanstalk, S3, and Simple Queue Service
- Setup and configure and administer LDAP server for DevOps user administration to production systems
- Administers shared databases for development team
- Developed Whole Life Insurance Illustration System
- Developed Annuity Life Insurance Administration System
- Designed implementation for storing and administering State Tax Withholding within Administration system
- Designed implementation for converting existing policies from legacy administration systems into Calcfocus administration system
- Handles day to day maintenence and bug fixes for Illustration and Policy Administration customers in java codebase

iPipeline Exton, PA
Developer: February 2013 - November 2020

- Initially worked on Illustration Calculation Systems before being transferred to work on Underwriting Systems from early 2018 onwards
- Wrote automated regression tool to run cases against available web service endpoint to test accuracy of custom calculations, cutting down on testing time and costs
- Developed user acceptance test automation suite for javascript user interface using Robot Framework cutting down on testing time, churn, and costs
- Moved existing infrastructure into AWS CodeDeploy, Terraform and Docker
- Led efforts to implement application database updates for new builds in AWS
- Github admin and team github lead during transition of source control from svn and TFS to git
- Lead efforts to adopt git lfs to decrease code checkout times and cut down on server costs
- Worked with third party vendors to develop custom web services for document imaging systems
- Worked with third party vendors to develop custom web services for group coverage in Underwriting System

- Worked with third party industry vendors to develop web services for lab results, paramed, and other services necessary for underwriting
- Supported customers in accessing productized Illustration API for multiple purposes
- Improved developer build scripts to make resetting of developer environment unmanaged, repeatable, and quicker
- Developed new e-signature solution for Life Insurance Illustrations after moving to Crystal Reports
- Developed speed enhancements for Illustration Calculation system to meet customer requirements
- Wrote custom software to improve detection of spelling mistakes in generated reports. Cutting down on defects and costs.
- Refactored code for Crystal Reports subsystem to allow for quicker PDF generation and easier maintenance and testing
- Developed coding standards for use across team
- Trained interns and onboarded new hires. Wrote documentation for new hires. Drastically cut down on ramp up time.
- Led documentation efforts of code base, best practices, and tools
- Engaged customers in on-site sessions for requirements. Uses industry knowledge and best practices to lead requirements.
- Maintained legacy carrier desktop illustration systems in C++
- Improved excel macros for updating insurance premium rates into Illustration Calculation System
- Day to day development of features and bugfixes in C# in Illustration system
- Day to day development of features and bugfixes in java and javascript Underwriting System

HDE Corporation Allentown, PA
Software Engineer: May 2011 - February 2013
- Wrote inventory and shipment management software system backed by MySQL
- Created infrastructure to sync sales data from third party Microsoft SQL based software to in house MySQL based system to allow for long term storage and custom application development
- Wrote user interface for inventory management system to allow for adjustments by warehouse staff
- Wrote integration for inventory management system to allow barcoding scanning of received inventory to automatically update stocked amounts in inventory database
- Created batch scripts with cron jobs to load shipments into database from csv files dropped into ftp server
- Created integration scripts to load predefined saved weights for inventory items into third party shipment system for quicker order processing
- Responsible for keeping server running for Inventory, Shipments, Returns, Accounting and Sales
- Created automated on-demand php based sales reports for Business Development team
- Created Paypal integration for Sales team for bulk sales