



## Career Summary

- 30 years in IT, 25+ years in architecture of complex enterprise or enterprise level solutions, participating in open-source FreeBSD or Linux kernel source projects for multiple architectures, also SME for modern JS frameworks like Node.js, Nuxt/Vue, Next/React, Angular, or architecting solutions in Java or Python.
- 10 years extensive experience working with AWS and other cloud providers such as GKE, Azure, DigitalOcean, cloud infrastructure and architecture for large, distributed software applications.
- 12 years' experience working with CI/CD pipelines using enterprise tools such as Enterprise GitHub and Enterprise Gitlab, SonarQube, Selenium and other automated test frameworks for testing, linting.
- 6 years' experience architecting and deploying Kubernetes on metal and in multicloud configurations. I have multiple k8s environments setup in my home for experimentation and personal projects, one of which provide thousands of CUDA cores for accelerated processing and RNN/LSTM.
- 1 year experience working with ML/AI applications and data science applications, mostly surrounding stock fundamental data, technical analysis, and algorithmic trading.

## Experience

### Sr. Development & Architecture Lead, Lumen

January 2013 to Present

- Modernized technology used for continued development and maintenance of CenturyLink Business Apps (SaaS/IaaS/PaaS applications) ecommerce. Upgraded all legacy infrastructure and migrated to modernized Cloud solution.
- Redesigned data flows from billing systems to front-end presentation – redesigned all data schemas using multiple database solutions to include MariaDB (MySQL), Oracle, MSSQL.
- Overhauled development pipeline using cloud-based infrastructure to include Jenkins, GitHub Enterprise, Kubernetes, and Docker.
- Established code quality, code review, and automated testing policies for all developers.
- Managed and mentored three teams of 6+ developers in the U.S. and off-shore (India).
- Salesforce Vlocity, Autopilot provisioning systems, AWS, Azure.
- Performed all security evaluations, code quality evaluations, CI/CD processes.
- Continually improved Agile workflow, working with marketing executives, security and infrastructure teams.

### Contractor/Consultant, SDI, LLC.

June 2016 to Present

- Evaluate existing infrastructure for Every/LocationOne application and provide decision matrix for technologies and architecture of SaaS redesign based on ROI/CBA.
- Manage third-party development team, establish process and delivery schedules.
- Liaison between Enterprise and smaller organizations for deliverables, price negotiations, setting expectations.
- Two-million-dollar project, over 2-years in development, 100% Cloud solution, AWS, GCP/GKE.
- NodeJS, ReactJS, VueJS, AngularJS, MongoDB, Kubernetes, Gitlab DevOps pipelines.
- Data Science, Python, Jupyter Notebooks, CUDA accelerated apps with RAPID, ML/AI, Deep Learning, TimescaleDB, Postgres, Tensorflow, RabbitMQ, some Kafka.



## Senior Technical Lead, DEG

January 2014 to May 2014

- Short contract, technical lead role for small team of Symfony2/PHP/node.js/Hadoop developers focused on the development of email marketing and analytics dashboard for large California based client (AXS Entertainment Group).
- Refactor application to adhere to Symfony design patterns and coding standards.
- Improve performance of integration with Hadoop/Big data services via node.js.

## Director of Engineering, Jammit, Inc.

November 2012 to March 2013

- Advised future direction of the company, optimized cloud and ecommerce platforms, improved performance of all systems.
- Architected and implemented integration with Jammit affiliates, Alfred and CCLI (world's largest sheet music publishers) integrating backend payment and fulfillment systems.
- Drupal (6 & 7), Symfony2, PHP all on LAMP stack, iOS/Objective-C and C#/.NET development for multi-platform solution.
- Cloud infrastructure, AWS

## Self-Employed/Contractor

January 2011 to March 2013

- Consulted CrossInnovation with setting up an ETL environment and establishing development pipeline for Saffron, and associative NoSQL database, consulted regarding the setup/implementation of Hadoop and other solutions.
- Consulted Children International with Information and Enterprise Architecture of fund raising and Internet marketing systems, to include mobile and Facebook applications, ASP.NET/MVC 3 & 4, (C#)
- Assisted Netsolus, a local cloud computing and hosting provider, with automating ticketing and control of their backend management processes using Python, PHP, Perl.
- Built and rolled out many Drupal7/Symfony2/PHP, ASP.NET and Java/JSP based web applications. All employ extensive JavaScript, jQuery, AngularJS front-end integration, some Backbone.js and Knockout.
- Built iPhone and Android applications using Xcode/Objective-C and Appcelerator Titanium, which uses JavaScript and the Titanium API to build native mobile apps.
- Built and deployed ecommerce systems supporting small- and large-scale entities from 10 to 7500 products, integration with multiple backend credit card and payment processors.
- Continued work on reverse proxy node.js addon which uses the V8 JavaScript, a C++ library, low-level socket communications to provide a dedicated reverse proxy for node.js instead of using nginx.

## Technical Director Barkley/Adamson

May 2009 to December 2010

- Technical direction and architecture of Fortune 500 websites and web applications for firms such as Nestlé Purina, Rawlings, Marmot, Hain Celestial (Terra Chips, Garden of Eatin', Earth's Best, Arrowhead Mills), using Drupal/PHP, ASP.NET, and some Python and Ruby on Rails projects.
- Worked with IT Director in optimization of network architecture of Adamson's headquarters in St. Louis.
- Barkley purchased Adamson due to its success in delivering high quality digital solutions, but unfortunately, after the purchase, Barkley lost Sonic as a customer and executed corporate-wide layoffs.

## Vice President/Enterprise Architecture Director, SPIDERtel

November 2006 to May 2009

- Lead team of developers to create sophisticated web applications for a wide array of customers using Drupal/PHP, ASP, and ASP.NET, Java, and Python.
- Managed full data center hosting over 1000 websites, collocation customers and application servers.
- Managed migration of all customers from R&D Technology, LLC. To SPIDERtel, Inc. after company was purchased in Nov. 2006



## President R&D Technology, LLC.

March 1994 to November 2006

- President and Owner of R&D Technology/R&D Associates, Inc. R&D provided custom software solutions for many start-ups and well-established companies around KC. Solutions ranged from embedded software to web and mobile apps for several industries to include transportation, medical, print and publishing. Technologies used ranged from C/C++, Java, PHP, ASP, and .NET.

## SiriCOMM, Inc.

October 2003 to November 2005

- Enterprise Architecture Director and Co-Founder.
- Developed nation-wide hot-spot Wi-Fi network with over 1000 nodes at Pilot Travel Centers, Love's Travel Stops and at many trucking weigh stations across the U.S.
- Created custom installation of FreeBSD with kernel module to control and secure access to the network for subscribers.
- Created full monitoring system for entire network where one network administrator could maintain the entire network.
- Wrote TCP/IP encapsulation routines to optimize buffering inside of MPE satellite network packets.
- Worked with ViaSAT to optimize data transfer rates and decrease latency over their extra-terrestrial networks.
- Maintained accounting and CRM system, built credit card processing system interfacing with Novus Networks.

## Technology Expertise

AWS, GKE, Azure, DigitalOcean Cloud, Kubernetes, Docker, VMWare/Hyper-V/VirtualBox, Vagrant, TCP/IP L2/L3 Routing, C/C++, C#, Objective-C, JavaScript, VueJS, ReactJS, AngularJS, HTML/CSS, PHP, Java, Perl, Python, Ruby, Bash, Linux, Windows, Mac, FreeBSD, AIX, Solaris, GitHub Repo: <https://github.com/dwoolworth>

## Education

Avila University  
BS, Marketing

1991-1994

UMKC  
Economics and Mathematics

1991-1992

## Skills

Agile/Scrum, Continuous Integration, Pair-Programming, Big Data/Data Science, FreeBSD, Linux/Ubuntu/CentOS, Windows, C/C++ (STL/ATL), Objective-C, C#, ASP.NET (MVC), JavaScript, Java, PHP, Python, Bash, Perl, jQuery, HTML5, CSS, Drupal, NodeJS, ReactJS, Vue/NuxtJS, Application Development, DevOps

## Software

JIRA, Git, GitHub Enterprise, Gitlab, Subversion, Jenkins, Docker, Kubernetes, VMWare, VirtualBox, VS Code, vim