William David Haas

Full Stack Engineer

employment@thedav.com
Google Voice: (985) 250-1801

Skill Detail

Full Stack Development

Worked extensively on web site front ends with UX designers to develop usable web based applications and present information. Designed and developed Jekyll, Liquid, Velocity, Perl, Python, and UNIX scripting languages to fetch and present managed data onto web pages including real time processing of database information. Designed and developed scripts and applications to process data and feed it into databases and data warehouses. Built systems to integrate new third-party systems into an existing complex infrastructures.

Interdisciplinary Research

Experience with software development in conjunction with subject matter experts. In the late 80's, at Dartmouth College I worked with PhD researchers in Engineering, Physics, Metallurgy, Chemistry and Mathematics to develop applications for graduate research and teaching. As a consultant I also worked with Finance professors to develop analytical tools for the Japanese stock market. From 1998 to 2005 I worked in the biotech industry building analytical tools for genomics and biochemical research. I was the primary administrator and developer for the in house Spotfire Installation which was used to deliver data company wide. Worked for NOAA writing analysis software for data collected by the world wide weather buoy system at the direction of meteorologists. Worked on a small business software product that managed inventory, payroll, taxes, and point of sale for wholesale and retail. Developed and maintained financial tools to aid users of a retirement system.

Algorithms Development

Extensive experience debugging and optimizing code developed by others as well as development of new algorithms for new problems.

Software Development

Experience with software development as a solo programmer and as the project manager for small teams developing a complex multi-host system. Extensive experience as an independent developer doing rapid prototyping on small projects with short deadlines. Experience with development of medium sized applications through full life-cycle on both UNIX and Windows environments. Familiar with basic algorithmic languages and extensive experience with C and with Perl for bioinformatics and web server CGI applications. Experience with VB6 and VB.NET for business applications. Experience with PHP and SOAP for web server scripting and Python for real time applications on NT embedded systems. Also have familiarity debugging and enhancing applications written by others in Java, javascript, ASP, ASP.NET, and Cold Fusion.

Web Development

Experience with server-side languages to produce web page content for static and dynamic page generation (Perl, Mason, CGI, PHP, SSI, .asp, .jsp) as well as client-side applications (Javascript) to generate page content in real-time, especially in the UNIX domain. Experience with server side PHP cross developed for Windows and UNIX servers. Experience with Cascade Velocity (dialect of Apache

Velocity). Migrated and mangage two Federal web sites from Serena Collage to Hannon Hill's Cascade. Redesigned and migrated the same two sites (tsp.gov and frtib.gov) from Cascade to GitHub/Federalist (Cloud.gov) using GitHub, Jekyll, Liquid and USWDS.

Data Visualization

Developed custom graphing tools for publications for PhD candidates. Worked with PhD scientists in active lab setting to visualize results and present them company wide using SpotFire. Built custom graphs of measurement data using PDP GD. Built custom web pages to display financial projections using HighCharts.

Agile Development

Recieved DevOps Foundation certificaton in 2018 as part of an initiative to move to Agile on the federal agency support project. Worked with other teams doing full-on Agile development and participated in their scrums. My teams tended to consist of me as the primary designer and developer with help from subject matter experts in UX design or database administration and content editors. As such, I had weekly meetings, a Kanban board and worked in a continuous integration model but did not have scrums or other team activites. I can work Agile but my broad background has allowed to me operate solo as a development team on smaller compartmentalized projects.

Scripting Languages

(Perl, csh, sh, sed, awk, Ruby, Python, Liquid, etc.) More than 30 years of solid UNIX programming including using the scripting languages. UNIX scripting is the basis for much of the web infrastructure design. In addition, 7 years of work in the Biotech field which uses Perl and similar scripting languages for the bulk of its analysis software because of its strong string capabilities.

System Architecture

Experience with design, implementation, and management of multi-server, heterogeneous infrastructure to support development and production activities as the Systems Architect. Experience as technical lead in group project planning with internal and external informatics, management and legal personnel. Also experienced as a technical resource providing guidance to individual software developers on small projects.

Cross-platform dev. UNIX

Expertise with UNIX as a programmer and system administrator on many different platforms8 RedHat Linux, Solaris 2.6-2.8, HP-UX, VVOS, BSDi, IRIX, IBM Risc System/6000, IBM RT (AOS), Sun OS, and Ultrix. Extensive experience with cross-platform development and distribution.

Database Administration

Designed, developed, and maintained numerous small databases to support development and production applications including some real-time applications. Worked as primary developer on several projects with a database team managing large scale databases. Built and documented custom stored procedure APIs to abstract the database and turn it into a web service.

System Administration

Work history includes several jobs working as a system administrator to develop tools to manage servers in heterogeneous environments. These jobs included common system administration duties as well as development and documentation of installation standards for configuration management.

Management

Managed development group of 2-5 people building applications for a mobile DVR with real-time remote access and control (ONGO). Managed department with a small staff (3-5 people) and a budget of $500K-$1M for 16 months (for 10 of those months, the company was publicly traded). Participated in monthly management meetings with company executives and was under budget every month (Icoria). Managed 8-11 students employed at a help desk (Dartmouth).

Teaching

Taught 18 sections of college level intro computer class over 3 years. Taught a college level programming class and was a teaching assistant for CS theory classes. Taught high school CS for one year. Trained and mentored junior programmers in various positions. 8+ years teaching martial arts to adults and children.