Charles Capps

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Career Summary

Experienced Senior Software Engineer with multifaceted expertise in process analysis, high profile project management, and management of legacy code. Proven knowledge of code quality management, team leadership, and business process implementation. Accomplished professional with comprehensive business and technical insight, collaboration skills, and strong team building skills. Practiced ability to drive high-functioning teams through stabilizing, controlling, and organizing the software development lifecycle.

Professional Experience

Stay-at-home Dad, St. Helens OR

Full-time Stay-at-home Dad

2016 - Present

A family crisis required pivoting away from a professional career to become a full-time stayat-home dad.

Business Skills

- Team Leadership
- Team Development
- Training / Mentoring
- Stakeholder Management
- Analytical Troubleshooting
- Code Quality
- Legacy Code Management
- Continual Improvement
- Process Analysis
- Strategic Planning
- Critical Thinking
- Business Strategy
- Project Management

Technical skills have been kept sharp by building small projects to scratch personal itches. Notable projects include a Python, SQLite, and VueJS-based chore chart, a PHP custom web content scraper, a C implementation of the Lox language from <u>Bob Nystrom's Crafting Interpreters</u>, and repurposing obsolete hardware to create a Proxmox virtualization cluster.

Silicon Mechanics, Bothell WA

Senior Developer & System Administrator (Remote)	2014 - 2016
IT Manager	2011 - 2014
Senior Developer & System Administrator	2008 - 2011
PHP Developer	2006 - 2008

Developer Role Responsibilities

- Develop and maintain the company's home-grown PHP-based ERP, CRM, CMS, and e-commerce system.
- Participated in, lead, and oversaw all aspects of the software development lifecycle process including planning, research gathering, crafting of stakeholder-approved specifications, implementation, testing, code review, and deployment.
- Hired, trained, and mentored a diverse and multifaceted team of software engineers and IT professionals.
- Collaborated with senior management, peers, and colleagues to drive evolution of the internal toolset to meet ever-changing business needs.

Select Projects & Accomplishments

Cluster Configurator

Designed a whole-rack configuration toolset for the SC07 Supercomputing conference allowing system configurators to nest within each other, requiring significant reworking of critical legacy code.

Migration to Modern PHP

Cleaned up use of deprecated functionality and fixed ongoing warnings for original codebase designed for PHP 5.0.x.

Unified Label Printing

Redesigned and streamlined programmatic creation of physical labels to eliminate inconsistencies between designs allowing for future changes as needed by business requirements.

Advance RMA Tracking System

Championed reworking of critical systems to better track customer support requests for replacement hardware through the normal ordering, purchasing, and accounting processes to ensure customers correctly exchanged defective parts.

Mini Configurator

Created a replacement API-compatible product configurator to support a new product line driven by increased automation requirements from the product management group.

IT Manager & System Administrator Role Responsibilities

- Provided desktop support as needed, troubleshooting issues and concerns until resolution.
- Ensured software configuration, installation, and administration with regard to network operations and software development.
- Coordinated with multiple vendors to update aging power, phone, and security camera infrastructure.
- Drove increased automation through mentoring junior members of the team.

Select Projects & Accomplishments

Redesigned & Recabled Production Floor Burn System Network

Collaborated with production floor technicians and engineers to redesign the physical and logical (VLAN-based) production floor network for increased speed, reliability, and flexibility.

Migration to Linux KVM Virtual Machines

Ensured severely out of date IT hardware was replaced with iSCSI-backed virtualization where possible to better mitigate risk and continue optimal business uptime.

Migration to G Suite ("Google Apps for Business")

Drove migration of data backup to G Suite after an unmonitored multiple-drive RAID failure occurred.

Migration from DSL to Fiber-Based Internet Connection

Secured business park's first-ever contract for fiber-based internet access, including negotiating and administering multiple contracts with multiple vendors. Achieved zero business disruption during transition.

Infopop Corporation / Social Strata Inc., Seattle, WA

Perl Developer

2001 - 2006

Maintained and improved the flagship-product "Ultimate Bulletin Board" written in Perl 5 and designed to run with a flat-file database on shared hosting accounts.

- Cemented communication of bug reports and workflow delegation as needed.
- Provided first rate customer and client service, troubleshooting issues until resolution.
- Collaborated with internal and external teams including beta testing teams and project managers to streamline operations.
- Performed detail-oriented coding in platform-agnostic Perl.

Technology Profile

- PHP 8, PHP 7, PHP 5
- Perl 5
- Python 3
- C (POSIX)
- MySQL / MariaDB / Percona Server
- MySQL Multi-Master Replication
- PostgreSQL
- Javascript (ECMAScript 6)
- HTML 5
- CSS 3
- SEO
- ElasticSearch

- VueJS
- jQuery
- GD
- ImageMagick
- PHPUnit
- Symfony
- PayPal Pro
- Avalara AvaTax
- JetBrains PHPStorm
- Visual Studio Code
- Jira
- Confluence

- MediaWiki
- Subversion
- Mercurial
- Git
- RHEL / CentOS 5, 6, 7
- Debian Buster
- Proxmox
- Linux KVM & libvirt
- VLANs
- Shorewall
- Ubiquiti EdgeOS (Vyatta / VyOS)
- CUPS