

Madison, Wisconsin

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## Core Principle: Technical Craftsmanship

“If you don’t have time to do it right, when are you going to have time to do it again?” Adopting a methodical, “Musgrave Rule” approach to system architecture to minimize technical debt and ensure long-term platform reliability.

## Experience

### University of Wisconsin System Administration (*Madison, WI*)

#### Senior Software Engineer (Level IV) | December 2021 – Present

- **Enterprise Platform Architecture:** Architect and maintain a high-availability WordPress Multisite ecosystem supporting 130+ production sites across 4 specialized networks (Public, HR, Internal, and Training).
- **Automated Modernization:** Orchestrated the migration to PHP 8.2 across the enterprise codebase, utilizing **Rector** for automated refactoring to ensure system-wide compatibility and security.
- **Platform Engineering:** Standardized the organizational developer experience by migrating the team from fragmented local environments to a unified **Lando/Docker/WSL2** stack, significantly reducing onboarding friction and improving local performance.
- **Infrastructure Automation:** Authored custom Bash and PowerShell scripts to automate environment state synchronization and disaster recovery backups via cloud storage.
- **Quality Governance:** Established strict code integrity standards by integrating **PHPStan** for static analysis and **WPCS/PHPCS** for linting into the core development lifecycle.

#### Institute for Business & Entrepreneurship - IT Programmer | February 2020 – December 2021

- Managed a multisite installation of WordPress, focusing on performance optimization and security hardening for entrepreneurial resource platforms.

#### Senior Systems Programmer | February 2016 – 2020

- **Lifecycle Management:** Led manual and automated source code upgrades through PHP 7.0, 7.1, and 7.2 for heavily modified multi-network environments.

- **Custom Tooling:** Developed specialized auditing tools to maintain database hygiene and content freshness across hundreds of endpoints.
- **Extensibility:** Engineered custom WordPress plugins to integrate Google and Bing Custom Search APIs and overhauled legacy employee directory systems for improved flexibility.

### **American Deposit Management Co. (Delafield, WI)**

#### **Manager of Administration / IS Coordinator | May 2013 – January 2016**

- **Strategic FinTech Automation:** Engineered a transaction engine to automate Mass Tort settlement distributions across banking networks; programmatically enforced 100% FDIC compliance while optimizing yield via rate-prioritization logic.
- **Mission-Critical Hardening:** Developed a Windows-based reporting suite (VB.NET/SQL) to replace manual, error-prone processes with automated, verifiable statement generation for high-net-worth Money Market and CD portfolios.
- **Architectural Oversight:** Recognized and mitigated systemic risks by implementing automated safety checks in fund distribution, ensuring data integrity across multi-million dollar account structures.

### **Key Projects**

#### **Private Cloud & Homelab Infrastructure**

- **Hypervisor Management:** Architected a high-availability home laboratory utilizing **Proxmox VE** to manage a fleet of Virtual Machines and LXC containers.
- **Service Orchestration:** Deployed and maintained a suite of self-hosted services using **Docker** and **Docker Compose**, prioritizing data sovereignty and local-first accessibility.
- **Network Security:** Integrated **Tailscale** for secure, encrypted mesh networking between internal nodes, eliminating the need for traditional VPN overhead.

#### **Network-in-a-Box (Portable Lab)**

- Engineered a portable, ruggedized network environment using **Docker**, **Tailscale**, and a mini-PC node for field-testing distributed systems and local-first media synchronization.

### **Technical Skills**

- **Languages:** PHP (15+ years), JavaScript, SQL/MySQL, Bash, PowerShell, Java, VB.NET.

- **Foundational Languages:** Java (Academic foundation in strict OOP, Interfaces, Abstract Classes, and Design Patterns).
- **Tools & Infrastructure:** Linux, Docker, Proxmox, WSL2, Lando, Tailscale, Git, Composer.
- **Methodologies:** Automated Refactoring (Rector), Static Analysis (PHPStan), CI/CD fundamentals, “Documentation as Code.”

## Education

**Waukesha County Technical College** *AAS - Programming - Web and Software Development*

## References

Professional references from senior leadership at current and past roles are available upon request.