

Jeremiah A. Brown

Senior Linux Systems & Infrastructure Administrator

Pittsburgh, PA

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PROFESSIONAL SUMMARY

Experienced Linux systems and infrastructure administrator with hands-on expertise in secure server operations, network services, automation, and infrastructure reliability. Former Associate Security Researcher at Carnegie Mellon University's Software Engineering Institute (CERT) in a cleared role. Background in systems maintenance, scripting, and technical problem solving with a focus on operational stability and secure configuration. Comfortable working independently in remote environments with responsibility for system uptime, backups, and secure operations.

CORE SKILLS

Systems & OS: Linux (Debian/Devuan), Unix-like environments

Networking: TCP/IP fundamentals, DNS, VPNs, TLS/SSL, firewall policies

Security Fundamentals: Secure configuration, protocol inspection, secure workflows

Scripting & Automation: Python, Bash, rsync

Infrastructure & Services: Email systems (Postfix/Dovecot), VPN endpoints, backups, monitoring practices

Tools: Wireshark, Fail2ban, BIND, Let's Encrypt, MySQL

PROFESSIONAL EXPERIENCE

Independent Linux & Infrastructure Administration

2020 – Present

Operate and maintain self-hosted Linux infrastructure with emphasis on reliability, security, and operational autonomy.

- Maintain and support Postfix/Dovecot email infrastructure across multiple domains
- Configure and enforce SPF, DKIM, DMARC, and TLS for secure mail delivery
- Integrate outbound mail relay via Mailgun for reputation-aware delivery
- Manage DNS (BIND) and reverse DNS configurations

- Administer Linux VPS servers and OpenVPN endpoints for secure connectivity
 - Implement firewall controls, Fail2ban, and log monitoring for service protection
 - Designed and maintain incremental backups with rsync and snapshot rotation
 - Maintain NAS with RAID1 redundancy and LUKS encryption
 - Perform routine updates, security hardening, and troubleshooting
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Software Engineering Institute (SEI), Carnegie Mellon University

Associate Security Researcher – CERT Monitoring & Response (Forensic Operations & Investigations)

2018 – 2019 | Pittsburgh, PA

- Conducted reverse engineering and vulnerability research in a secure research environment
 - Performed network protocol analysis and traffic inspection with Wireshark
 - Built Python tooling to support analytic workflows and research processes
 - Operated in controlled research facilities including shielded (Faraday) environments
 - Collaborated with multidisciplinary teams at CERT to analyze and document security findings
 - Position required U.S. Government security clearance
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medSage Technologies

Director of Business Development

2009 – 2011 | Pittsburgh, PA

- Designed and implemented SQL-based analytics and reporting solutions
 - Built Python integration scripts to connect external systems and automate data workflows
 - Performed data analysis to support operational needs and client requirements
 - Briefed executive stakeholders at customer organizations on technical deliverables, insights, and solution outcomes
 - Provided technical support and troubleshooting for analytical systems
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Fiserv

Director of Software Development

2006 – 2009 | Pittsburgh, PA

- Supported operation and integration of enterprise financial systems

- Introduced continuous integration processes for database build and deployment
 - Led architectural reviews and resolved cross-system integration challenges
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McKesson Corporation (TechRx)

Software Development Manager

2001 – 2006 | Coraopolis, PA

- Designed and supported pharmacy fulfillment systems
 - Improved system reliability and performance through focused optimization
 - Conducted technical troubleshooting and cross-team problem resolution
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EDUCATION

B.S. in Computer Science, Highest Distinction

Indiana University — 1999

CERTIFICATIONS

CISSP — Certified Information Systems Security Professional

2018 (inactive since 2020)