Jason Blackwell

Remote - Knoxville, TN

Profile

Highly motivated Systems Administrator and Security Expert with 12 years of experience securing and optimizing complex IT infrastructures. Proven success in leading security initiatives, designing and implementing secure systems, and resolving critical issues.

Education

Graduate Certificate: Pen Testing & Ethical Hacking

Completed 2019

SANS Technology Institute

Remote

Bachelor of Science, Computer Science

Completed 2014

University of Wisconsin Oshkosh

Oshkosh, WI

Experience

Independent Projects

July 2023-Present

Independent Projects Remote

- o Linux Systems Administration: Designed, implemented, and maintain 3 secure Linux server environments utilizing Docker/Podman containers, running 14 containers and 2 complex web applications
- o Secure Cloud Architecture: Developed and deployed secure cloud-based infrastructure using Oracle Cloud Infrastructure to host multiple containerized open-source web applications
- o Open Source Involvement: Actively contribute to the open-source community as an Arch AUR Package Maintainer and a member of the Fedora and KDE communities, collaborating on projects, providing technical expertise, and expanding my knowledge of Linux systems.

Senior Embedded Information Security Engineer

September 2017-July 2023

Apple Inc.

Cupertino, CA -> Remote (Full-time)

- Co-designed for unique patent pending embedded device
- o Designed test suites for 300,000 embedded device production line
- o Led embedded SW team to deploy operating system and command and control IoT system for embedded device
- Provided security architecture design to cloud and configuration management system for IoT devices
- o Lead engineer on Research and Development team designing unique embedded security devices
- Oversaw device production from design to deployment and maintenance
- o Visited International factory sites to perform network security assessments
- o Participated in multiple Incident Response investigations that led to arrests of insider threat actors
- o Engineer on tactical jump team focused on increasing security of targeted projects
- o Designed security solutions for unique problems and high security environments
- o Interfaced with engineering teams and leadership to ensure Information Security initiatives are executed despite implementation and resourcing challenges
- o Engaged with project teams to provide Information Security policy and procedures training
- o Consulted with engineering teams and provided security services including coordinating penetration tests, prioritized vulnerability scan reports, recommended and provided security training, and assisted engineers in designing and deploying secure systems

Information Security Engineer

SECURA Insurance

July 2015-September 2017

Appleton, WI

- o Responsible for the entire Internet presence for the company including all websites and web services
- o Administered and maintained more than 50 Linux servers hosting public websites, OpenVPN, proxies, and firewalls
- o Provided analysis and recommendations for Information Security posture to IT Management
- o Administered and maintained email edge relays and spam filtering
- o Assisted in designing secure methods of communication for external websites and web services
- o Administered multiple VPN servers that provide tiers of remote access for all employees
- o Maintained external and internal firewalls to secure DMZ and LAN networks
- o Worked with Operations and Service Desk personnel to report and mitigate security issues
- o Oversaw and maintained corporate Mobile Device Management and Bring Your Own Device programs
- o Maintained code in Perl to support web services and administration functions
- Managed all SSL/TLS and code signing certificates acting as the Certificate Authority for the organization
- Configured automated code deployment to DMZ servers using TFS/Git and Octopus Deploy
- Assisted in platform migrations and upgrades including virtualization
- o Maintained web proxy, content filtering, and Internet access for corporate and guest WIFI across three office locations granting access to entire staff
- o Assessed and performed up-to-date patching on all systems across the enterprise
- o Audited and monitored production alerts, logs, and tools for unauthorized transactions and intrusions

SECURA Insurance

Appleton, WI

May 2014-July 2015

- o Performed full stack development using modern technologies and frameworks
- o Led projects to ensure compatibility with new and legacy technologies
- o Member of the UI team during the development and implementation of the customer portal (my.secura.net) using jQuery Mobile, HTML5. CSS3
- o Developed and maintained .NET web services and websites for intranet applications
- o Developed a course administration and an enrollment web application to allow associates to enroll in performance development programs using C#, MVC and Bootstrap
- o Implemented a web service that retrieves and inserts documents into multiple document systems that is used by both internal and external customer facing websites
- o Designed and developed web services that interface between customer facing applications and IBM mainframe programs and data

IT-Intern Programming

May 2013-May 2014

SECURA Insurance

Appleton, WI

- o Responsible for designing and implementing web services that connect .NET client software to back-end databases (Microsoft SQL Server and IBM DB2) and performing server side processing to process the quotes and calculate rates
- o Developed VB.NET Windows Forms applications used to quote and upload insurance policies
- o Assisted in converting a local desktop application into a web-enabled desktop application using RESTful web services
- o Designed and developed a proof of delivery system used by our corporate Mail Center to track packages from the point of delivery to the handoff to the responsible employee. This application utilizes a C# Windows Forms application that interfaced with a signature pad and a barcode scanner. It communicates with a C# web service. A C# Windows Service was developed to perform the sync and update with a ruggedized mobile computer running Windows Embedded using USB batch sync.

IT-Intern

October 2012-January 2013

Hortonville, WI

- Hortonville Area School District
- o Performed maintenance and support on network devices
- Responsible for researching and maintaining vendor relationships regarding future technology purchases
- o Provided technology training to administrative and teaching staff

Technologies

Server, macOS

Tools: Visual Studio, MVC 5, Web API 2, Team Foundation

Server, Octopus Deploy, VMware, Office 365, Exchange Online Protection, Cisco ASA, Citrix Netscaler, Xcode

Operating Systems: CentOS, Fedora, Windows, Windows Programming Languages: C#, Perl, VB.NET, Javascript,

CSS, Python, Powershell, Swift, Objective-C

Apache, nginx, iptables, Icinga, Grafana, Software: Prometheus, Ansible, WireGuard, Squid, OpenVPN, Git, Git-Lab, Postfix, Sendmail, MariaDB, PostgreSQL, MediaWiki, Docker

Patent Applications

o Named Inventor on Apple Inc. Patent Application Number: 17340408 - 2021-12-16 - NETWORK INTERFACE DEVICE

Certifications

- GIAC Security Essentials Certification (GSEC)
- o GIAC Certified Incident Handler (GCIH)
- o GIAC Certified Penetration Tester (GPEN)

Events and Community Involvement

| Arch User Repository (AUR) Maintainter: Remote | March 2024 |
|---|----------------|
| SANS 560: Network Penetration Testing and Ethical Hacking: Denver, CO | October 2018 |
| SANS 504: Hacker Tools, Techniques, Exploits, and Incident Handling: Remote | July 2018 |
| DEFCON 25: Las Vegas, NV | July 2017 |
| Contributor to the "Heads" Project: Open Source secure boot firmware | January 2017 |
| VMware User Group Meeting: Appleton, WI | October 2016 |
| SANS NetWars Continuous: Remote | September 2016 |

DEFCON 24: Las Vegas, NV August 2016

SANS SEC401: Security Essentials: Remote June 2016

Chaos Communication Congress 32C3 CTF: Remote December 2015