

## **Michael Tatum**

#> Linux && Security;

512.817.8678

Pflugerville, TX

michaeltatum.xyz

#### Summary

A skilled systems engineer with wide-ranging experience in Linux-based environments, specializing in cloud infrastructure management, cybersecurity, and system optimization. Competence demonstrated through roles overseeing multi-cloud environments, managing international data centers, and automating systems administration using tools such as Bash scripting, Ansible, and Salt. Proven expertise in network monitoring, Apache server hardening, database optimization (MariaDB/MySQL), and advanced routing solutions with F5 and Nginx for secure and scalable system architectures. Seeking opportunities to advance enterprise-level infrastructure reliability and security within dynamic cloud or on-premise environments.

## □ Clouds

Ton-tier Cloud Providers:

- Amazon Web Services (AWS)
- Microsoft Azure
- Oracle Cloud

Mid-tier Cloud Providers:

- DigitalOcean
- Heroku

Specialty Cloud Providers:

- MLab (MongoDB-focused)

**Budget-friendly Cloud Providers:** 

- OVH - SoYouStart

Web Hosting-focused Cloud Providers:

- GoDaddy
- HostGator

#### Operating Systems

**Enterprise Distributions:** 

- Red Hat Enterprise Linux (RHEL)
- Oracle Linux (OEL)
- Rocky Linux
- Ubuntu

 ☐ Certifications

Sep 2024 - Present

## AZ-900: Azure Fundamentals

May 2012 - Present

## Linux/UNIX Server Administrator Certificate

May 2011 - Present

## PC Repair and Network Technician Certificate

Mar 2019 - Current

## Systems Engineer II

- · Promoted to Systems Engineer II in 2022 after recognition for outstanding contributions to cloud infrastructure management.
- Orchestrated and streamlined multi-cloud environments, ensuring seamless administration within Accruent CloudOps for peak performance and reliability across 4 software products, 4 public clouds, and 5 geo-locations, managing approximately 1,000 servers.
- · Implemented and maintained highly available, redundant international data centers to facilitate global application deployments using Java and Apache Tomcat, spanning 5-7 environment levels, including production.
- · Fortified RedHat Linux, CentOS Linux, and Oracle Enterprise Linux systems, prioritizing stability and security.
- Executed proactive cybersecurity vulnerability scanning and patching to uphold compliance and shield infrastructure, achieving a record-low RPA score below 7k.
- · Enhanced application availability and performance by strategically deploying and tuning F5 routing and loadbalancing, utilizing HA pools for failover.
- Transformed systems administration processes by developing and deploying automation scripts with Bash, Ansible, and Salt, achieving a reduction in task runtimes from days to hours and optimizing scalability and efficiency.
- · Adopted ChatGPT to streamline team workflows by automating Linux administration tasks, troubleshooting server configurations, optimizing Ansible playbooks and SSH setups, and providing accessible explanations for complex technical concepts to enhance team productivity.

Mar 2016 - Feb 2019

## **Linux Systems Engineer**

- Orchestrated and executed a solo, full-scale migration of ~50 on-premises Linux servers and applications to the DigitalOcean Cloud.
- Engineered and maintained a scalable cloud infrastructure within a Linux-based environment, specializing in RHEL systems, supporting tens of thousands of routine users and a lifetime of approximately 100,000 users.
- Pioneered the implementation of network monitoring and logging systems, improving performance and securing the network, and achieving a 300% increase in log diagnosis speed.
- Hardened and optimized Apache web servers, amplifying performance and resolving vulnerabilities, and expediting patching by an estimated 400%. • Maintained and streamlined server operations for Moodle LMS, WordPress, Drupal, Redmine, and Jira, achieving
- consistent performance and compressing build times from days to hours via Bash automation. · Enhanced and secured MariaDB/MySQL databases, bolstering application performance and data integrity, and
- streamlining responsiveness through isolation strategies. • Audited network configurations with Nmap scripts, documenting ~100 network devices; maintained
- documentation to ensure compliance with industry security standards.
- Employed Nginx for robust proxying and load balancing to construct a scalable system architecture.
- Implemented data backup and recovery processes for ~30 Linux servers, with a recovery time objective (RTO) of <2 hours.

Jun 2015 - Mar 2016

## EMT+

- · Delivered and maintained critical technical support within a MacOS Google corporate domain, ensuring maximum system and equipment functionality for ~250 Nest call center employees.
- · Upheld infrastructure reliability through proactive hardware maintenance, diagnosing, repairing, and upgrading a fleet of roughly 200 Mac workstations.

#### Community Distributions:

- Fedora
- Dehian

#### Security-focused Distributions:

- BlackArch
- Kali Linux
- TAILS (TOR)

#### Specialized Distributions:

- DBAN (data destruction)
- ShredOS (data destruction)
- BackBox (penetration testing)
- TurnKey Linux (appliance-based)

#### Non-Linux Operating Systems:

- Windows
- MacOS

#### **△** Skills

- . Operating Systems (Linux, various distributions)
- Scripting and Automation (Bash, Ansible, SaltStack)
- · Virtualization (VirtualBox, VMWare)
- Networking (TCP/IP, DNS, DHCP, NMap, ZenMap)
- Network Security (IPTables, Firewalld, F5, network scanning, vulnerability assessment)
- Web Servers (Apache, NGINX)
- Databases (MySQL, MariaDB)
- Content Management Systems (Wordpress, Drupal, Moodle)
- Project Management Tools (Jira, Redmine)
- System Administration (GParted, CloneZilla, BackupNinja, RKHunter, Lynis, Siege, Cockpit)
- Security Tools (RKHunter, Lynis, NMap, ZenMap, Siege)
- Cloud and Configuration Management (Ansible, SaltStack)
- ChatGPT Systems (Copilot, Gemini, Meta Al, NotebookLM)

- Orchestrated operating system and software updates to enforce compliance with Google corporate standards and security protocols.
- Mitigated networking system issues by pinpointing connectivity problems and implementing solutions to minimize downtime.
- Streamlined CAMP inventory management processes for IT assets, guaranteeing accurate tracking and equipment availability.
- Triaged and resolved user support requests via Help Desk ticketing systems, expediting technical solutions to elevate end-user productivity.

Aug 2015 - May 2016

## **Adjunct Professor**

**Austin Community College** 

- Prepared comprehensive instruction on Linux and UNIX systems, focusing on practical applications and theoretical concepts.
- Designed and arranged curricula to address diverse student learning needs in alignment with academic standards.
- Facilitated classroom discussions and hands-on labs, enhancing students' technical proficiency with operating system environments.
- Assessed student performance through tailored assignments, exams, and feedback to ensure mastery of subject
  matter
- · Maintained up-to-date knowledge of industry trends to provide relevant and current course content.
- Promoted a collaborative learning environment by encouraging active participation and peer interaction during lessons

Feb 2012 - May 2015

## Desktop Technician

Peniel Solutions

- Sustained and troubleshot a Windows 7 corporate domain environment, ensuring system stability and compliance.
- Pioneered a streamlined update process for all company-approved software, reducing update time and fortifying
  consistent security protocols.
- Accelerated workstation support, including hardware installation, diagnostics, and repairs, adhering to company
  protocols.
- Configured network settings and corrected networking issues to guarantee seamless connectivity and user productivity.
- Started mobile device management strategies and secured devices within the corporate infrastructure.
- Optimized backup management processes and refined user support through Help Desk ticketing systems for rapid issue resolution.

Aug 2006 - Feb 2012

## PC Repair and Network Technician

Freelance

- Conducted operating system maintenance and management to ensure optimal performance and reliability in both commercial and SOHO environments.
- Performed software installation, updates, and troubleshooting to resolve technical issues efficiently.
- Devised networking support, including configuration, optimization, and troubleshooting of connectivity problems.
- Diagnosed and repaired hardware issues to restore functionality across PCs and related devices.
- Enacted preventive measures to maintain the stability and security of systems and networks.
  Advised on best practices for system upgrades and network improvements to meet user needs effectively.

#### **△** Education

Aug 2012 - May 2015

# BS - Information Technology: Systems and Security

**Georgia Gwinnett College** 

Aug 2010 - May 2012

AAS - Linux/UNIX Networking

**Gwinnett Technical College**