NICHOLAS HARRAS

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EXPERIENCE

Institute for Genomics and Evolutionary Medicine – Temple University

Philadelphia, PA

Technical Support Specialist

September 2020 - present

- Administering all IT equipment across the lab, including 100 Windows workstations, six Ubuntu workstations, three Apache web servers, three NAS servers, and two HPC clusters
- Assisting 30 doctorate and post-doctorate and 40 undergraduate researchers with the use of our technology, including writing **SLURM** sbatch scripts, deploying **Ubuntu** workstations
- Responsible for the configuration and continuous uptime of a **SLURM** High Performance Computing cluster used for academic research
- Authoring documentation and guidelines for the administration of all IT devices in the lab
- Coordinating purchases for all IT equipment, ranging from cables to enterprise servers
- Leveraging my information security experience toward monthly internal penetration tests of our lab's network
- Investigating, resolving, and mitigating any security breaches of the lab's network, including the installation of cryptojacking malware, and generic brute-force scans against our infrastructure

National Oceanic and Atmospheric Administration

Computer Operator

Princeton, NJ June 2019 - February 2020

- Utilized **Slurm** and other command line tools to maintain various Federal **OpenSUSE Linux** HPC systems that scientists at NOAA's Geophysical Fluid Dynamics Lab rely on for their weather modeling
- Responded to or handed off approximately 10 tickets a day within **OTRS**, in a workplace of about 200 users.
- Answered phones and assisted climatologists and engineers with technical issues, often with SSH tunneling, X2Go connections, Slurm errors, and compiler issues
- Developed **Python** and **tcsh** scripts to automate various maintenance tasks

PROJECTS

TimeTree 4 Server Deployment

Oversaw deployment, auditing, and maintenance for every step of the process for the migration of the evolutionary knowledge-base website timetree.org from a **Xen** High Availability cluster, to redundant, dedicated servers.

- Facilitated the exchange of information between the site's development team and hardware vendors to acquire the machines best suited to host the next interation of the website
- Physically deployed all of the equipment, and configured all of the systems a secure, public-facing web server
- Collaborated closely with the security team to accurately model the attack surface of the server and develop a security policy to adhere to as I work to continuously maintain it

SKILLS

- Operating Systems: Windows 10, Ubuntu 16+, RHEL/CentOS 7+, OpenSUSE, Kali Linux 18+, ParrotOS Security 4.11, VirtualBox 6.1, Xen
- Programming and Scripting: Python 2.7/3, C, Java, Go, bash, PowerShell
- Databases and Web Dev: Apache 2.4, PHP 7/8, Codelgniter, MySQL, PostreSQL
- **Security Tools:** Nmap 7.8, WireShark 3+, tcpdump, curl, wget, Metasploit Framework 6, Burp Suite Community Edition, John the Ripper 1.9+, hashcat 6+, DirBuster, Active Directory, LDAP
- Clearance: Public Trust
- **Certifications:** CompTIA Security+

ORGANIZATIONS AND INTERESTS

- Organizations: 2600, Hive76 Makerspace, The Open Organization of Lockpickers, West Philadelphia Tool Library
- Interests: HackTheBox.eu, CTFtime.org, VulnHub.com, OverTheWire.org, Pwnagotchi, LeanPub books

EDUCATION