

Nathan Woodburn

Summary

Technical Support Specialist and System Administrator specializing in Linux environments, Docker, and DNS management. Proven ability to deploy and maintain secure server environments, including Proxmox hypervisors and VLAN-isolated networks, while leveraging Python for automation and service deployment. Expertly troubleshoot critical domain and network issues, providing front-line support and collaborating with engineering teams for continuous improvement.

Experience

Technical Support Specialist Namebase - Remote | Oct 2022 - JUN 2025

- Provided technical support for users, focusing on domain setup, configuration, and troubleshooting.
- Worked with engineering teams to report bugs and suggest product improvements.
- Diagnosed complex DNS issues including nameserver propagation and zone file errors.
- Gained hands-on experience with recursive and authoritative DNS, DNSSEC, and decentralized naming.
- Engaged with the community through social platforms and represented Namebase at conferences.

Small Business Owner Nathan 3D Printing Service | Feb 2020 - Dec 2023

- Operated a custom 3D printing and CAD design business independently.
- Handled client communication, design iteration, and order fulfillment.
- Built end-to-end project management and technical design skills.

Audio Production Volunteer 1WAY FM | Feb 2021 - Dec 2021

- Recorded, edited, and produced audio content for community radio broadcasts.
- Supported the production team in day-to-day technical operations.
- Gained practical skills in audio engineering and collaborative media work.

Education

Bachelor of Computing

Australian National University | 2022 - Present

- Currently pursuing a Bachelor of Computing with a specialization in cybersecurity.
- Gaining hands-on experience in network security, system design, and secure software development.
- Building a strong foundation in computer science principles, programming, and system architecture.
- Collaborating on group projects and labs to apply theoretical knowledge to real-world challenges.

Discovering Engineering

Australian National University | YearS 11 & 12

- Completed an enrichment program introducing core engineering disciplines and technical concepts.
- Explored CAD modeling, design thinking, and practical problem-solving through workshops and case studies.
- Gained early exposure to engineering tools and technical communication, laying the groundwork for later technical studies.

Home Educated Self-Directed Learning

- Cultivated time management, self-discipline, and critical thinking skills crucial for success in tech.
- Developed a strong passion for technology, programming, and system administration through independent exploration.
- Built custom applications, managed servers, and solved technical challenges in a flexible learning environment.

Projects

Server Lab

Proxmox, Networking, Linux, DNS

- Maintain a personal physical server running Proxmox hypervisor.
- Host multiple virtual machines across three VLANs with isolated firewalls for enhanced security.
- Provide DNS and recursive resolver hosting services for external users.
- Host a suite of self-hosted services such as Gitea, Authentik, Vaultwarden and Nextcloud.

HNS DoH

DNS, Handshake, DoH, Distributed Systems, Linux

- Manage a distributed Handshake DoH resolver network spanning six independent nodes.
- Administer four nodes and collaborate with two external operators on updates, patches, and troubleshooting.
- Ensure uptime and resiliency across geographically distributed infrastructure.

Fire Wallet

Python, Handshake, Plugin Architecture

- Developed a modular Python-based Handshake wallet with plugin support for extensibility.
- Presented at HandyCon 2024 and 2025, showcasing usability improvements and HNS site resolution.

Skills

Programming & Development

- **Python 3**: Proficient in building web services and automation tools; experienced with libraries such as Flask, requests, and asyncio.
- **C & Java**: Applied in university coursework and labs for systems programming, algorithms, and object-oriented design.
- **C#**: Experienced in building Windows applications, including debugging and testing since 2016.

Networking & Security

- **DNS & DNSSEC**: Skilled in managing DNS zones, records, and DNSSEC; experienced with both authoritative and recursive resolvers.
- **Linux System Administration**: Manage cloud and physical servers, using the command line for scripting, security, and package management.
- **Server Infrastructure**: Operate a dedicated server running Proxmox; manage virtual machines across VLANs with separate firewalls to enhance isolation and security.

Technical Support & Communication

- **Technical Support**: Deliver front-line technical assistance, troubleshoot software/platform issues, and communicate clearly with users.
- **Community Engagement**: Active contributor and presenter within the Handshake and blockchain communities.
- Tools: Git, Docker, NGINX, SSH, Bash scripting.

Conferences

Presenter – HandyCon 2025 Online | March 2025

- Firewallet Updates & How to Resolve HNS Sites Presented new features and usability improvements in FireWallet, including user-friendly Handshake resolution methods.
- Building the Future of Handshake: Advancing Wallets & Ecosystem Development (co-presented with Rithvik Vibhu) Discussed strategies for wallet development, improving developer tooling, and enhancing the decentralized web experience on Handshake.

Judge & Speaker - Onchain Names & Identity Hackathon Vietnam | April 2024

- Invited judge for blockchain-focused hackathon entries using Handshake and decentralized identity tools.
- Delivered a talk comparing Handshake DNS with traditional DNS systems, highlighting benefits of decentralized roots for security and censorship resistance.

Presenter – HandyCon 2024 Online | March 2024

• **FireWallet** – Showcased a modular Handshake wallet written in Python, designed with plugin support to enable extensibility and developer customization.

Presenter – HandyCon 2023 Online | March 2023

- Presented a technical walkthrough on launching websites with Handshake domains.
- Covered HTTPS setup using DANE to eliminate reliance on traditional certificate authorities.