NATHAN WOODBURN

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SUMMARY

Cybersecurity-focused computing student with hands-on experience in DNS, Linux system administration, server infrastructure, and decentralized technologies. Skilled in providing technical support, resolving complex domain-related issues, and engaging in open-source blockchain communities. Experienced speaker and contributor at Handshake-related conferences. Passionate about building secure, resilient, and privacy-respecting systems from the ground up.

EXPERIENCE

TECHNICAL SUPPORT SPECIALIST
NAMEBASE - REMOTE | OCT 2022 - PRESENT

- 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, cryptography, 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 and cybersecurity.
- 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

FIREWALLET
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.

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.

HNSDOH
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.

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.