





# NATHAN WOODBURN

contact@nathan.woodburn.au | <https://nathan.woodburn.au>

 @nathanwoodburn |  @nathanwoodburn

## SUMMARY

Linux and server administration student with experience managing servers, DNS, virtualization, and networking. Skilled in deploying and maintaining self-hosted services, troubleshooting complex system issues, and building resilient, automated infrastructures. Passionate about open-source tools and practical system design.

## 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.
- 

## 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.
-

## **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.
- 

## **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.
-