

Ying Shuen Jocelyn, Choo

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Solutions Engineer with hands-on experience in Linux/Unix administration, virtualization, and enterprise patch automation. Building and operating a self-hosted, 3-node Proxmox VE cluster managed entirely as code (Terraform, Ansible) — with a self-hosted GitLab CI/CD pipeline, a 3-node Kubernetes (K3s) cluster running GitOps deployments via ArgoCD, and full Prometheus/Grafana/Loki observability across 13 hosts. Seeking a DevOps Engineer role.

WORK EXPERIENCE

Expert Systems Limited	Jun. 2024 – Present
<i>Solutions Engineer</i>	<i>Hong Kong</i>

- Manage **on-prem infrastructure** and set up **virtualization** platforms for internal and client environments
- Work onsite at a major bank as a **Windows and Unix Engineer**, coordinating and deploying security patches across servers using TrueSight Automation
- Support system hardening, monitor patch compliance, and assist in incident remediation and change windows
- **Stack:** Unix/Linux, TrueSight Automation, VMware, Hyper-V, Windows Server, Sangfor HCI VDI

Best Buy	Aug. 2023 – Apr. 2024
<i>Computer Solution Advisor</i>	<i>Vancouver, CA</i>

- Delivered personalized technical support at a Fortune 500 consumer-electronics retailer, collaborating with Geek Squad on tech services
- **Awarded Star of the Month (Nov. 2023)** for exceptional personalized service

Sing Yeah Store	Jun. 2022 – Nov. 2022
<i>Freelance Developer</i>	<i>Remote</i>

- Built and managed an online store; configured payment and cloud platforms (Yedpay, AWS) and implemented customer data security measures

Study With Me Limited	Jun. 2021 – Oct. 2021
<i>Software Engineer Intern</i>	<i>Hong Kong</i>

- Assisted in design and deployment of AWS cloud components; automated Zoom sessions with Selenium; deployed via Bitbucket; improved site performance with Redis caching

PROJECTS

Self-Hosted DevOps Homelab	2025 – Present
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- Design and operate a **3-node Proxmox VE 9 cluster as Infrastructure-as-Code** — provisioned with Terraform (bpg/proxmox), configured with Ansible (15+ reusable roles), secrets encrypted in Ansible Vault; version-controlled in a public GitHub repo with a git-first workflow
- Built a **self-hosted CI/CD pipeline** — GitLab CE + GitLab Runner (Docker executor) gate every push with ansible-lint (production profile), terraform validate and tfLint, plus a **Trivy security-scanning stage** that triaged and remediated IaC misconfigurations (unencrypted volumes, missing IMDSv2) to take Terraform findings from 7 to 0; GitHub Actions runs as a complementary public smoke test (fmt, yamllint, shellcheck)
- Deployed a **3-node Kubernetes (K3s) cluster**, provisioned by Terraform and configured by Ansible; installed **ArgoCD** and proved commit-to-deploy GitOps — a replica change pushed to git rolled out cluster-wide with no kubectl, and manual drift was automatically reverted by selfHeal. Workloads are packaged as custom **Helm charts** and exposed through **Traefik Ingress**

- Completed a **zero-downtime migration** of family-facing services (Jellyfin, Nextcloud, Immich photo backup) onto a dedicated production node, separated from a disposable CI/CD and Kubernetes lab tier
- Built **centralized observability** — Prometheus + Grafana with provisioned dashboards, plus Loki/Promtail log aggregation — monitoring all **13 hosts** across the fleet, with 3 alert rules (ZFS pool health, disk SMART health, host-down) delivered by email
- Ran and **timed a disaster-recovery restore drill** from Proxmox Backup Server — restored a VM in 12m 11s, verified data integrity by mounting the disk read-only from the host, and documented the recovery runbook
- Implemented a **zero-trust access model**: Cloudflare Tunnel (zero open router ports) for public-facing services, Tailscale for all admin access; SSO and approval workflows on user-facing apps, plus a VPN kill-switch with a self-healing systemd watchdog
- Deployed a MikroTik managed 2.5GbE switch and am implementing VLAN network segmentation for family, lab, and management zones
- Document every architecture decision as an **ADR** (Architecture Decision Record) and maintain a public build journal

Stack: Proxmox VE, Terraform, Ansible, Docker, Kubernetes (K3s), Helm, ArgoCD, GitLab CI, GitHub Actions, Trivy, Prometheus, Grafana, Loki, ZFS, Cloudflare, Tailscale, Linux

Feature Extraction in Malware (Final Year Project)

Jun. 2021 – May 2022

- Performed dynamic analysis in Ubuntu to extract malicious/benign API features for machine-learning training
- Implemented Python ML experiments comparing six algorithms; **XGBoost** achieved the best overall accuracy

EDUCATION

The Hong Kong Polytechnic University

BSc, Internet and Multimedia Technologies — Second Class Honors, Division 1

Nov. 2022

Hong Kong

Shoreline Community College

Associate of Arts, Computer Science

Jun. 2015

Seattle, WA

CERTIFICATIONS & SKILLS

Certifications: Microsoft 365 Certified: Teams Administrator Associate; Microsoft 365 Fundamentals

Infrastructure as Code: Terraform, Ansible, Ansible Vault, cloud-init, Docker Compose

Container Orchestration: Kubernetes (K3s), Helm, ArgoCD (GitOps), Docker

Virtualization & Infrastructure: Proxmox VE, VMware, Hyper-V, Sangfor HCI, ZFS, Windows Server, Linux/Unix

CI/CD & Automation: GitLab CI, GitHub Actions, Git, TrueSight Automation, Selenium, Bitbucket

Security: Trivy (IaC/config scanning), Ansible Vault, Cloudflare Tunnel & Tailscale (zero-trust access)

Monitoring & Networking: Prometheus, Grafana, Loki, nginx, AdGuard DNS, VLANs, Cloudflare Tunnel, Tailscale, Redis

Cloud & Scripting: AWS, Python, Bash, PowerShell

Interests: DIY home improvement, car camping & backpacking, home gym