

PENGHIAN ANG

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Bilingual: English / Mandarin Chinese

SUMMARY

Site Reliability and DevOps engineer with 5+ years operating mission-critical production infrastructure at scale. Led incident response, release coordination, capacity/cost planning, and reliability engineering for Tencent PUBG Mobile (6,000+ VMs, 40+ regions, up to 10M daily concurrent users); owned blockchain validator and RPC infrastructure across 9 protocols at Crypto.com; and built automation for institutional custody operations at Coinbase. Strong in observability (Prometheus, Grafana, Datadog), SLO/SLI definition, incident command, and infrastructure-as-code. CKA, AWS Solutions Architect, and Terraform certified.

PROFESSIONAL EXPERIENCE

Cold Storage Engineer III | Coinbase | Jan 2025 – Present

- Automated a multi-step balance-restoration alert pipeline (Slack alert → parse → Datadog data → heuristic compliance rules → Glean internal checks → Messari external/hack checks) replacing manual investigation; cut token spend by \$500–\$1,000 USD/month per pipeline via retrieval pre-filtering
- Built pre-call automation that pre-pulls institutional client context before video verification calls (Calendly → Datadog → Snowflake → internal tools → Salesforce → internal compliance and safety documentation → Slack) so operators have all transaction, identity, and approval data ready before joining.
- Approved high-value institutional cold-storage transactions and conducted video verification under Coinbase Prime and Custody operational protocols.
- Operated 24x7 global on-call rotation under strict compliance and security controls; partnered with Security, Product, and Engineering on operational improvements.

Stack: Python, n8n, Datadog, Snowflake, Salesforce, Glean, Messari, Slack API, AWS

Senior Blockchain Security DevOps Engineer | Crypto.com | Dec 2023 – Jan 2025

- Owned all blockchain node infrastructure (full, archival, validator) across 9 protocols: (TON, Conflux, Celestia, Oasis, Fetch.ai, NEO3, Neutron, ZetaChain, Vara) including upgrades and incident response.
- Improved node reliability through stress testing across the full request path (Azure Front Door → load balancer Nginx/Kong → blockchain node) identifying bottlenecks before they reached production.
- Built node deployment pipeline: Terraform-provisioned Azure VMs, Docker images via GitHub, deployed through Azure DevOps CI/CD with auto-pull of updated images.
- Consolidated multiple Cosmos-family Ansible playbooks into one template, cutting new-chain rollout time and standardizing upgrades.
- Wrote custom Prometheus exporters for chain-specific node health monitoring, visualized in Grafana.
- Owned proof-of-concept for secure developer access (VS Code → Teleport → VM).

Stack: Terraform, Docker, Ansible, Azure DevOps, Azure, Nginx, Kong, Prometheus, Grafana, Teleport, Bash, Python

DevOps Engineer | Tencent | May 2022 – Dec 2023

- Sole DevOps point of contact for [PUBG Mobile global](#) production: 6,000+ VMs across 40+ regions and 6 cloud providers (Tencent Cloud, AWS, Azure, GCP, Huawei, Zenlayer) serving 4M–10M daily concurrent players.
- Led release coordination for two major PUBG Mobile game patches, orchestrating rollout across global server fleets with cross-team go-live timing and verification.
- Partnered with business teams on capacity and cost planning FinOps: forecast VM requirements ahead of holiday traffic peaks to scale fleets up for expansion and down afterward, balancing readiness against cloud spend.
- Built an automated DDoS response system (state machine block → disable server → re-enable → cleanup integrated with BlueKing Job Platform) cutting manual intervention during attacks.
- Built FairPing QoS engine equalizing per-player latency within a match using numpy outlier removal and iptables/tc traffic shaping.
- Reduced alerting from 600+ noisy rules to 140 symptom-based actionable alerts; introduced a new SLI for battle-join success rate after finding the team measured system latency rather than user-visible outcomes.
- Built internal FastAPI services for IP-whitelist management exposed safely to third-party vendors and real-time latency/monitoring tooling on Redis and BKData; managed fleet via Terraform and BlueKing CI/CD.
- Solution adopted as best-practice reference across teams by the Director of Tencent Overseas Games.

Stack: Python, FastAPI, Bash, Terraform, Redis, MySQL, Tencent Cloud (BlueKing / BK Job / BKData), iptables/tc, numpy/pandas, multi-cloud (AWS/Azure/GCP/Huawei/Zenlayer)

DevOps Engineer | UP DevLabs | Oct 2021 – May 2022

- Supported live production for games across AWS and Aliyun, including off-hours and midnight patch deployments via Jenkins CI/CD.
- Built repeatable deployment pipelines; implemented ELK for developer self-service log search, reducing ops support load; established Grafana/Prometheus monitoring for system health and capacity planning.

Stack: AWS, Aliyun, Tencent Cloud, Jenkins, ELK, Grafana, Prometheus, Bash, Python

System Analyst | Kenrich Partners | Jul 2021 – Oct 2021

- Day-1 phishing incident response. Coordinated with legal counsel (Rajah and Tann) and performed root cause analysis.
- Led MAS TRM compliance initiatives: asset tracking, system hardening, SIEM setup.
- Migrated on-prem infrastructure to Azure.

SNOC Engineer | GovTech | Nov 2020 – Jul 2021

- Monitored and maintained uptime for critical government systems using AWS CloudWatch, Grafana, Splunk, and SolarWinds.
- Supported real-time incident triage, root cause analysis, and cyber threat detection for national digital services.

NOC Engineer | Netpluz Asia | Feb 2020 – Nov 2020

- Provisioned and troubleshot circuits (Baccess, GPON, MetroE) and configured Cisco and Sophos network devices.
- Built Python automation tools to streamline operations, reducing manual ITSM reporting by 80%.

PROJECTS

Site Reliability Engineer | Valigator | (Independent contract, 2025)

- Built production-grade Solana staking infrastructure for a white-glove validator service.
- Authored Ansible playbooks to automate validator provisioning, upgrades, and monitoring setup.
- Developed a custom Solana Node Exporter integrated with Prometheus and Grafana dashboards.

Senior Infrastructure Support Engineer | Thoughtworks | (Independent contract, 2024 - 2025)

- Led end-to-end build and maintenance of SNTC.org.sg, a public good project supporting Singapore's special needs community.
- Designed and deployed enterprise-scale cloud infrastructure using Infrastructure as Code, improving scalability and resilience.
- Delivered government-requested website updates within 2 weeks, ensuring compliance and uninterrupted service.
- Partnered with CTO/CIO/COO stakeholders to align technical delivery with organizational goals.

SKILLS

Reliability & SRE: SLO/SLI definition, error budgets, incident command, blameless postmortems, on-call rotation, stress/load testing, capacity & cost planning (FinOps), disaster recovery (RTO/RPO)

Cloud & IaC: AWS, Azure, GCP, Tencent Cloud, Aliyun, Huawei Cloud | Terraform, Ansible

Containers & CI/CD: Docker, Kubernetes (CKA), Helm | GitHub Actions, Azure DevOps, Jenkins, ArgoCD

Observability: Prometheus, Grafana, Datadog, ELK, Splunk, PagerDuty, custom exporters

Scripting & Automation: Python (FastAPI, Flask), Bash, n8n

Networking: Nginx, Kong, load balancing, Azure Front Door, iptables/tc, DNS, TCP/IP

Blockchain: Solana, TON, Cosmos (Neutron, Fetch.ai, Vara), Celestia, Oasis, Conflux, NEO3, ZetaChain | validator & RPC node operations

Security & Compliance: SIEM, MAS TRM, segregation of duties, incident response, RCA, post-mortems

Open Source: github.com/angpenghian

- **Agent Times:** x402 pay-per-request news API designed for AI agents to consume; Node.js, Express, Docker, SearXNG, SQLite on DigitalOcean. 28,000+ articles indexed across 1,100+ RSS feeds; received first real USDC payment on Base mainnet.
- **solana-ansible-kit:** Production-grade Ansible automation provisioning Solana validator fleets with security hardening, performance tuning, and zero-downtime upgrades.
- **solana-repro-builds:** Automated CI/CD pipeline (GitHub Actions) publishing reproducible Solana validator binaries with hermetic Docker builds and checksum verification.
- **solana-exporter:** Prometheus exporter (Python/FastAPI) for Solana validator observability, exposing 26+ metrics with a 21-panel Grafana dashboard.

CERTIFICATIONS

- CKA: Certified Kubernetes Administrator
- HashiCorp Certified: Terraform Associate
- AWS Certified Solutions Architect Associate
- AWS Certified Cloud Practitioner
- Tencent Cloud Solutions Architect Associate Engineer
- Tencent Cloud SysOps Associate Engineer
- Microsoft Certified: Azure Fundamentals
- Sophos Certified Engineer

EDUCATION

University of Wollongong — coursework toward B.Sc. Computer Science (Digital Systems Security)

Diploma in Infocomm and Digital Media (GPA 3.9), Temasek Polytechnic

Higher Nitec in Information Technology, ITE College West