MING-SHIUN (TAKO) TSAI

Seattle, WA | +1 (206) 476-5346 | TakoTsai.us@gmail.com | linkedin.com/in/TakoTsai |

Mandarin (Native), English (Fluent)

SUMMARY

9+ years of global experience in the technology sector, with 6+ years at AWS specializing in Networking, Security, and Edge Services. Bridges East and West through cross-regional expertise spanning APJC and NAMER with native Mandarin and fluent English. Go-to expert for resolving complex challenges, driving product team fixes, and delivering architectural recommendations. Builds GenAI-powered tools to automate troubleshooting and eliminate operational burden.

CERTIFICATIONS & SKILLS

TECHNICAL SKILLS

Python · Bash · IPv4/v6 · TCP/IP/TLS · DNS/DHCP/NAT · HTTP · PKI · Wireshark · BGP · CDN · LoadBalancer · Firewall · WAF · AntiDDoS

AWS CERTIFICATIONS

Solutions Architect – Professional · Advanced Networking – Specialty · Public Speech Certificate · AntiDDoS/CloudFront/WAF SME

AWS SERVICES

VPC · EC2 · S3 · CloudFront · Shield · WAF · ELB · Network Firewall · Global Accelerator · Lambda · SQS · SNS · DynamoDB · CDK

PROFESSIONAL EXPERIENCE

Amazon Web Services (AWS)

Senior Cloud Support Engineer   Seattle, WA | Dec 2023 – Present

RESPONSIBILITIES

> Led support team in **key customer escalation management**—providing rapid response and short-term mitigations while coordinating multi-stakeholders for long-term solutions through AWS best practices.

> Served as **DDoS Response Operation**, using Shield/WAF/CDN/Global Accelerator best practices to respond to attacks for 200+ enterprise customers in gaming, crypto, IoT, and e-commerce.

> Served as Tier1 **Support Experience Owner**, analyzing diagnostic patterns to build automated workflows and internal tools enhancing customer support experience.

> **Built internal automation tools** for AWS Support, including automated customer issue triage workflows and **GenAI-powered** diagnostic skills.

ACHIEVEMENTS

> Led design and implementation of **AWS Edge Diagnostic Tool** enabling a public one-click troubleshooting for AWS Edge Services. Architected with AWS Serverless + CDK and CI/CD.

> Built **AI log analysis workflows**, enabling GenAI Agents to analyze internal CDN logs and identify root causes.

> Redesigned internal **Machine Translation service** migrating to Amazon Bedrock GenAI. Implemented Guardrails to prevent prompt injection attacks.

> Led AWS Shield Advanced adoption, built automated AntiDDoS solution, leveraged VPC Origin to eliminate 200+ EIPs— saving **$32.2K/month**.

> Delivered multi-CDN architecture PoC (Google CDN/CloudFront/F5) with health checks, automatic failover, and routing policies based on geolocation, cost, and availability.

Cloud Support Engineer   Seattle, WA & Taiwan | Jun 2019 – Dec 2023

RESPONSIBILITIES

> Troubleshot complex networking, security, and edge service issues (VPC, CloudFront, Route 53, WAF, Shield, S3, EBS, EFS) for enterprise clients including Fortune 500 companies.

> **Managed enterprise customer and security escalations** from frontline engineers, delivering rapid resolution for critical production incidents.

> Optimized operational processes and mentored global cross-functional teams on networking and security best practices.

ACHIEVEMENTS

> Achieved 400+ cases/year (**141.66%** of goal), 4.98/5 rating, **40 consecutive months zero negative feedback**— earning account team recognition.

> **Built cross-cloud monitoring** (AWS/Alibaba/Azure/GCP) for gaming customer serving 40M+ users. Solution adopted by Global Accelerator team.

- Led Spring4Shell (CVE-2022-22963/22965) rapid response, coordinating Security and WAF teams to deliver mitigation rules within 24 hours for 438+ cases.
- Guided customer to redesign TLS Offload architecture, achieving **71% cost reduction ($200K/month savings)**. Identified and reproduced a critical NLB TLS resumption defect during the engagement, coordinating with NLB team to deliver a global fix.
- Led AkamaiCDN to AWS Global Accelerator migration achieving 40% cost reduction and 89% latency improvement.

AVer Information
Advanced Information Technical Engineer
New Taipei, Taiwan | Nov 2017 – May 2019

RESPONSIBILITIES

- Managed IT infrastructure and led technical projects for enterprise systems including Windows AD, DNS, SAP, and Fortinet firewalls.
- Oversaw network architecture design and implementation across multiple regional offices.

ACHIEVEMENTS

- Led V2P migration converting 259 physical servers to VMware vSphere including Windows AD, DNS, SAP, Fortinet FW critical services.
- Integrated SAP PLM with 8 SMT production lines into SAS Viya, enabling forecasting for finance, production, and sales teams.
- Architected IPSec VPN infrastructure connecting North America, Europe, and Taiwan offices, reducing SSL VPN licensing costs.

4ipnet Inc
Network Engineer
Taipei, Taiwan | Oct 2016 – Nov 2017

RESPONSIBILITIES

- Developed Linux drivers for Qualcomm 802.11 wireless chipsets. Supported WiFi AP firmware development and testing.

ACHIEVEMENTS

- Built fully automated CI/CD pipeline for WiFi Access Point firmware release and testing.

PUBLICATIONS & SPEAKING

"New AWS WAF AntiDDoS Managed Rules"
AWS Official Blog, 2025

"How do I use AWS WAF to mitigate DDoS attacks?"
AWS Knowledge Center, 2025

"Amazon CloudFront VPC Origin Best Practice"
AWS Official Blog, 2025

"A Lightweight Autoscaling Mechanism for Fog Computing..."
(90 citations)
IEEE Trans. Industrial Informatics, 2018

Speaking: AWS Taipei Summit 2022, AWS Tech Summit (2022, 2024 APJC, 2025 NAMER)

EDUCATION

National Central University (NCU) | Taoyuan, Taiwan
M.S. in Computer Science & Information Engineering | 2014 – 2016

National Changhua University of Education (NCUE) | Changhua, Taiwan
B.S. in Computer Science & Information Engineering | 2010 – 2014