MING-SHIUN (TAKO) TSAI

Seattle, WA | +1 (206) 476-5346 | tako.tsai@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

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

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