

Yi Tseng

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SUMMARY

Senior Software Engineer with extensive experience in **Cloud Infrastructure** and **Generative AI**. Expert in deploying scalable services on Kubernetes and AWS, complemented by deep expertise in software-defined networking and robust backend development. Specialized in building **Agentic Workflows**, **RAG systems**, and **LLM tool usage** using LangChain and LlamaIndex.

EXPERIENCE

Intel Corporation | Cloud Software Development Engineer | *April 2022 – July 2025*

- **Platform & Foundational Services:** Building foundational platform services including **system telemetry and observability**, **Identity and Access Control (IAM)**, product installer, and internal developer environments for **Edge Manageability Framework (EMF)**.
- **Cloud & DevOps Orchestration:** Utilized **Golang** for package delivery services and managed scalable cloud resources on **AWS** (EKS, RDS, S3, Lambda). Orchestrated **Kubernetes** cluster lifecycle and established robust **GitOps workflows** (ArgoCD) using **Terraform** for Infrastructure as Code (IaC).
- **AI Agent Development:** Architected a **GenAI Service Management Agent** to automate the provisioning and diagnostics of internal development environments. Implemented **ReAct prompting** and **custom LLM tool calls** (LangChain/LlamaIndex), **reducing Mean Time To Detect (MTTD) security vulnerabilities from 2 hour to 10 minutes** by automating checks for outdated kernel/packages.
- **LLM & RAG Implementation:** Engineered **Retrieval Augmented Generation (RAG)** pipelines and deployed optimized **local LLM models**. The agent's combined capabilities **identified 50% in potential monthly cost savings** by tracking and surfacing underutilized developer VMs and resource usage.

Open Networking Foundation (ONF) | Member of Technical Staff | *July 2018 – April 2022*

- **Stratum OS Development:** Co-developed **Stratum**, an open-source switch operating system, in collaboration with **Google** and **Intel**. Implemented **gNMI** and **P4Runtime** protocols to enable software-defined management of white-box switches.
- **SD-Fabric Architecture:** Built the control plane for **SD-Fabric**, a programmable network fabric for edge applications. Utilized **Kubernetes** for orchestration and **Golang** for high-performance microservices.
- **DevOps & Infrastructure:** Managed production-grade CI/CD pipelines and infrastructure using **Terraform**, **Jenkins**, and **GitHub Actions**, significantly reducing deployment times for the distributed engineering team.

Open Networking Foundation (ONF) | Engineering Intern (USA) | *January 2017 – February 2018*

- **SDN Controller Development:** Contributed to the **ONOS** (Open Network Operating System) controller and **M-CORD** (Mobile Central Office Re-architected as a Datacenter) project.
- **Industry Collaboration:** Collaborated directly with engineers from **Google** and **Intel** to implement next-generation programmable data plane solutions (P4).
- **Impact:** Work contributed to the **Google Tor.p4 demo** showcased at SDN NFV World Congress, demonstrating P4Runtime integration on commercial hardware.

Cyber Link | QA Intern | *July 2010 – August 2010*

- Developed automatic testing tools using **Autoit** to find bugs and expedite the Quality Assurance process.

SKILLS

Category	Keywords
DevOps & Infrastructure	Terraform (IaC), GitOps (ArgoCD), Jenkins, GitHub Actions, CI/CD Automation, Cluster Lifecycle Management, Telemetry, Observability, IAM
Cloud & Edge Computing	AWS (EKS, RDS, S3, ECS, Load Balancers, Lambda, IAM), Kubernetes, Edge Manageability Framework, Istio Service Mesh
AI/ML & Generative AI	RAG, AI Agent Development, LangChain, LlamaIndex, LLM Tool Calls, Prompt Engineering, ReAct Prompting, Artificial Neural Networks
Backend & Languages	Golang, Python, Java, RESTful API Design, SQL & NoSQL DB Schema Design
Networking	SDN (ONOS), P4/Protocol Independent Packet Processor, Segment Routing, VPLS/MPLS, BGP

EDUCATION

National Chiao Tung University M.S. in Computer Science | *2014 – 2018*

- *Selected for 1-year overseas internship at Open Networking Foundation (USA), which extended the program timeline.*

Tatung University B.S. in Computer Science and Engineering | *2010 – 2014*