Ryan Jia-Ming Wong

 github.com/ryanjwong · 909–655–8447 · ryanjwong007@gmail.com · linkedin.com/in/ryanjmwong

EDUCATION

University of California San Diego — Expected: Dec 2025
Bachelor's of Science in Computer Science — La Jolla, CA

Relevant Courses: Operating Systems, Advanced Data Structures & Algorithms, Computer Architecture & Assembly, Natural Language Processing, Network Applications, Discrete Math, Algorithm Design & Analysis, Linear Algebra

TECHNICAL SKILLS

- **Languages:** Go, C++, C#, Java, JavaScript, Python, TypeScript, Groovy, Bash, HTML, CSS, LC-3
- **Tools/Technologies:** AWS, Ansible, Docker, Kubernetes, Grafana, Git, GCP, Podman, SQL, ArgoCD, Jenkins, Prometheus, Linux, ASP.NET, Next.js, SSH, React.js, Terraform, Node.js, ChatGPT, Claude Code, Artifactory

EXPERIENCE

NVIDIA — June 2025 – Sep 2025
Software Engineer Intern – AI Infrastructure — Santa Clara, CA (Hybrid)

- Created a network monitoring probe using **Go** that captures and analyzes **TCP/UDP** traffic at set intervals, processing packet-level data using BPF filters on **Kubernetes** and **Slurm** GPU clusters, then logs metrics on **Prometheus**
- Modified a **CGO** library to capture upload/download packets/bytes and IPs/ports for each running process
- Implemented a comprehensive IP enrichment process that identifies the corresponding Autonomous Service Number (**ASN**), **AWS** Service, **SLURM** workflow, and destination region alongside multiple thread-safe caches
- Optimized architecture for concurrency using **Go routines** and mutexes for parallel IP lookups and DNS resolution
- Deployed probe via **Kubernetes DaemonSet** across **Prod, Stage, and Dev**, **8+ clusters**, and **1000+ nodes**
- Developed a **Network Operations Center (NOC-style)** Dashboard using **Grafana** featuring **20+** visualization panels including heatmaps, time series graphs, and alert status indicators

Tesla Motors — Jan 2024 – Sep 2024
Software Engineer Intern – DevOps Build and Release Engineering — Fremont, CA (Hybrid)

- Integrated legacy **C#** API with **1000+** lines into a modern API server, rewriting code to use interfaces and unit tests, preserving complete functionality, improving readability, modularity, and maintainability
- Automated disk cleanup of servers using **SSH** to securely check for capacity, seamlessly integrating the cleanup in the build and deploy process with **Groovy**, resulting in **80%** fewer errors due to lack of disk space
- Retrofit **Jenkins CI/CD** pipelines from solely supporting **C#** applications to supporting **Python** applications as well
- Added additional build-steps using **Groovy** to securely push and pull **Python** containers to and from **Artifactory**
- Wrote a **Jenkins** job to automatically delete outdated **Git** branches, eliminating **100%** of outdated branches
- Migrated **50+** apps across **100+** namespaces and 3 **Kubernetes** clusters, patching manifest YAMLs, **Fully Qualified Domain Names**, **Varnish Cache** configs, resulting in future scalability and reliability

Red Hat — Jun 2023 – Sep 2023
Partner Solutions Architect Intern – Telco Media and Edge — Raleigh, NC (Remote)

- Collaborated with Telco Engineering to create metric dashboards on **OpenShift** clusters, displaying CPU/RAM usage
- Leveraged **Grafana** alongside **Prometheus** to provide advanced logs and metrics for **K8s** clusters running vRAN
- Simplified Global Telco Media Entertainment travel expense logging/recording, reduced data entry time by **75%**
- Created Partner Ecosystem Solutions Architect Team page providing essential partner and architect information

CERTIFICATIONS

- **AWS Certified Solutions Architect – Associate**
- **Red Hat Certified Specialist in Containers**
- **Terraform Associate**

PROJECTS

Atlas-CLI (Go) — July 2025 – Present

- Wrote a **CLI** using **Go** to manage infrastructure across different providers (**AWS, GCP, minikube**)
- Installation and configuration of **ArgoCD**, **Prometheus**, and **Grafana** will be automated through **Ansible** playbooks
- **GitOps** will setup via **ArgoCD** and automatic creation of **Github Repositories** alongside **Github Actions**

Anonymous Web Services (NodeJS) — Jan 2023 – Dec 2023

- Created a pseudo **AWS Lambda** code execution platform, clients connect to hosts through UDP holepunching
- Integrated **hyperswarm** library to establish secure connection, sends code via **P2P** connection through a custom CLI