# GUANMING QIAO

guanmingqiao@gmail.com | github.com/GuanmingQiao | +65 82077426

## EDUCATION

**M.S. in Computer Science**, University of British Columbia, Vancouver                    Aug 2023 – Jun 2025

**B.S. in Computer Science**, Columbia University, New York                    Aug 2017 – May 2019

- **Has right-to-work in Singapore and do not need visa sponsorship or incur foreigner levy/ quota**

## TECHNOLOGIES AND SKILLS

- **Certificates**: AWS Certified Solutions Architect – Associate, Professional Scrum Master I (Scrum.org)
- **Language:** Python, Java, Bash, SQL, Groovy
- **Tools & Skills:** Git, Linux, AWS, Docker, Kubernetes, Computer Networks, Software Testing & Verification

## TECHNICAL PROFESSIONAL EXPERIENCE

**DevOps Engineer Co-op** (Platform Team), Planview, Vancouver                    Sep 2024 – Dec 2024
- Modernized the continuous integration (CI) process of core Planview services by migrating CI workflow from Jenkins to **GitHub Actions**, and set up Datadog **Kubernetes monitoring** for self-hosted GitHub Action runners
- Developed Disaster Recovery script in Python and Helm that migrates application data and Kafka state across EKS clusters by leveraging EC2 Snapshots and k8s PVCs, achieving **minutes-level service state recovery** in DR exercise
- Onboarded new applications to Kubernetes by configuring Helm Charts for ArgoCD deployment and managing Terraform resources to enable automated CI/CD workflows
- Maintenance for 10+ on-prem VMs, and used Ansible to automate SSL cert rotations and disk cleanup tasks

**Research Intern** (Platform Team), FuzzLand, Palo Alto                    Apr 2024 – Sep 2024
- Spearheaded the development of *InvGen*, a RAG + CoT LLM agent that detects vulnerabilities in EVM smart contracts and generates corresponding Foundry invariants and human-readable reports
- Achieved past exploit **detection accuracy of 70%** as evaluated on peer benchmark, repo has **12 forks and 94 stars**
- Participated as a researcher in optimizing *ItyFuzz*, a state-of-the-art **fuzz testing** tool for Decentralized Applications (DApp), leveraging sequence-based scheduling to **boost search efficiency on select oracles by 80%**

**DevOps Engineer** (Platform Team), GrubHub, New York                    Aug 2019 – Sep 2020
- **DevOps & Site Reliability Engineering**
  - Built *Service Discovery Agent* in **Python**, a lightweight sidecar that manages micro-service instances' lifecycle in custom service registry, leveraging **gRPC** and **REST API** to communicate with GrubHub's other internal services
  - Developed a Python app, *Eureka-Lifecycle*, to handle graceful exit of terminating **AWS EC2** instances, enabling safer rollout of AWS autoscaling for 50+ services using AWS CloudWatch that saved major cloud provider costs
- **AWS Infrastructure-as-Code**
  - Implemented GrubHub's AWS resource management tool with Pulumi SDK, developing the project in Python
  - Created IaC **CI/CD** Tooling, leveraging **Groovy** for **Jenkins** and Spring Expression Language for **Spinnaker**
  - Worked across teams to onboard 260+ pre-production and 220+ production Elastic Load Balancers, Application Load Balancers, and Network Balancers under IaC management, with 0 production incident
  - Enhanced infrastructure resilience by ensuring consistent deployment patterns revoking unaudited AWS access privileges from developers, with the team being recognized in tech news for the project

## ADDITIONAL PROFESSIONAL EXPERIENCE

**Senior Product Manager** (Growth Platform Team), Bybit, Singapore                    Sep 2022 – May 2023
- From 0 to 1 managed the iteration of **crypto campaign management system**, driving user acquisition and retention
- Promoted new platform to 200+ global teammates, reducing campaign setup time from 24+ hours to less than 60m

**Product Manager** (Content Platform Team), Tencent, China                    Apr 2021 – Jul 2022
- Drove user growth strategy of a 50-million daily active user (DAU) algorithmic short video app; worked with data scientists and stakeholders to boost user return rate by 20%, publish rate by 1.1% & publish retention by 3.1%