Jiale Lin

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Education

University of Colorado Boulder - Master of Science in Computer Science (May 2025) University of Arizona - Bachelor in Mathematics (CS Emphasis) (May 2019)

Professional Experience

Aviatrix - Santa Clara, CA Senior Software Engineer (2024–Present) Senior MTS (2023–2024) MTS (2022–2023)

- Security & Networking: Built secure multi-cloud automation with TLS and Zero-Trust; implemented eBPF/iptables validation for firewall upgrades and DDoS mitigation; hardened supply chain with SBOM and policy gates.
- **Software Development:** Developed REST/gRPC services using Go, Python, Bash, Kafka; optimized service boundaries, caching, and concurrency for scalability and reliability.
- Infrastructure & DevOps Automation: Automated infrastructure with Terraform; operated Kubernetes across AWS, Azure, and GCP; built CI/CD with GitHub Actions, Jenkins, ArgoCD, and GitOps, reducing deployment time by 30%.

Veeva Systems - Pleasanton, CA

Software Development Engineer in Test (Aug 2021 – May 2022)

- BDD Framework Development: Implemented a cross-platform BDD framework using Kotlin, Cucumber, and Gradle; integrated with Jenkins CI to automate execution and expand coverage.
- **UI Test Automation:** Automated web UI with Selenium and native iOS/Android with Appium; integrated suites into CI/CD with dashboards and flaky-test quarantine.
- Process Optimization: Streamlined QA by refactoring suites and optimizing test cases, improving defect detection and reducing regression escapes.

Google Fiber (via Adecco) - Mountain View, CA

Test Engineer (Jun 2019 – Jun 2021)

- **Test Automation:** Developed a Page Object Model framework with Selenium/WebDriver (Java) for Angular apps, reducing test failures by 25%.
- **Database Optimization:** Built BigQuery SQL objects (tables, views, macros, procedures), boosting query performance by 30%.
- Automation: Automated tasks using Google Apps Script, Python, and Bash, saving 15 hrs/week.

Key Projects

- Multi-Protocol Router Sim (C++, FRR, BGP/OSPF/ISIS, Netem, CMake): FRR control-plane integration; token-bucket/WFQ shaping; tc/netem impairments; gtest coverage and pcap diffing; CLI & YAML scenarios for regression suites.
- AI-Powered Network Traffic Classifier (C++, Python, TF/ONNX, eBPF, gRPC, K8s): Realtime packet/flow features via eBPF; ONNX model served over async gRPC on Kubernetes with rollout guards (shadow A/B, drift detection, canary). Qt6/Electron dashboard with rate/latency charts; CI for model eval (AUC/PR), onnxruntime CPU/GPU.
- Graph-based Social Recommender (Python, Node2Vec, FAISS, MF, Airflow): Graph ETL → Node2Vec embeddings + matrix factorization; FAISS ANN for sub-ms top-k retrieval; offline metrics (AUC, NDCG) and online CTR lift (double-digit). Deployed as FastAPI service with Redis cache; Airflow DAGs for retraining/backfills.

Technical Skills

Core Skills: Rust, eBPF, iptables, TLS, Zero-Trust, BGP, OSPF, ISIS, DDoS mitigation **Additional Skills:** Selenium, Appium, Kubernetes, Docker, Terraform, Selenium, Appium

Resume Customization Summary

Job Match Score: 128.6% Requirements Matched: 18/23