

Ashar S. Ahmed

Software Engineer | U.S. Citizen | ashar@ahmed.org | GitHub

SUMMARY

Software engineer with 4+ years building Python backend services, cloud applications, and data pipelines on AWS. Experienced designing REST APIs and microservices, processing high-volume real-time and batch telemetry data, and shipping production systems with Terraform, Docker, and CI/CD. Comfortable across distributed systems, event-driven architectures, and relational/NoSQL data stores (PostgreSQL, DynamoDB). Holds AWS Solutions Architect & Developer certifications; builds with a secure-by-design mindset (CISSP).

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, SQL, PL/SQL, Bash, PowerShell

Cloud / Infrastructure: AWS (IAM, S3, DynamoDB, CloudWatch, CloudTrail), Azure, Docker, Kubernetes, Terraform, Terragrunt

Backend / APIs: REST APIs, microservices, event-driven architectures, message/streaming pipelines, GitHub Actions CI/CD

Data: PostgreSQL, DynamoDB, Oracle Database, SQL Server; real-time & batch data pipelines; Apache Spark (PySpark); stream and log processing

Observability: Prometheus, Grafana, Loki, structured logging, metric instrumentation

Practices: Agile development, secure SDLC, automated testing, code coverage gates, policy-as-code (Checkov)

PROFESSIONAL EXPERIENCE

Technical Contractor, Mercor Intelligence, San Francisco, CA

May 2026 – Present

- Provide technical expertise and structured feedback to a frontier artificial intelligence lab, supporting the training and evaluation of large language models
- Assess model outputs for accuracy, reasoning quality, and specification adherence across software engineering and general-knowledge domains

Cyber Security Advisor, Dr. Shariq Mumtaz Medicine Professional Corporation

Jan. 2023 – Present

- Designed Python backend automation and microservices for endpoint configuration, telemetry collection, and compliance reporting across a distributed fleet of macOS and Windows devices
- Built real-time, event-driven data pipelines that ingest and correlate high-volume identity, endpoint, and network telemetry; cut detection latency (MTTD) from days to under 1 hour
- Automated policy deployment and configuration management across distributed endpoints; standardized baselines reduced unsolicited traffic by **80%**
- Designed internal tooling and KPI dashboards (Python, Prometheus/Grafana) enabling data-driven tracking of risk, SLAs, and remediation

Software Developer, Department of Industry, Canadian Digital Service

Feb. 2021 – Jan. 2022

- Built and deployed secure AWS infrastructure (IAM, S3, DynamoDB, CloudWatch) via Terraform/Terragrunt; managed NoSQL data stores and enforced policy-as-code scanning with Checkov across all modules
- Designed and shipped backend services and request-validation APIs that eliminated bot-driven abuse across all form endpoints without adding user friction
- Implemented CI/CD quality gates and automated testing, increasing code coverage from ~20% to **85%**; reduced client-reported data incidents from 4–5 to 1–2 per cycle
- Awarded the **Directors' General Award of Merit** for delivery impact on national spectrum operations

Software Developer Intern, National Research Council of Canada (NRC)

Sept. 2020 – Dec. 2020

- Developed full-stack data applications on Oracle Database powering research data pipelines across multiple NRC divisions
- Engineered PL/SQL stored procedures and SQL-based automation to replace manual batch workflows, eliminating ~10 hrs/week of manual processing

PROJECTS & PUBLICATIONS

QR-CLI | qr-cli.dev

- Built and published a cross-platform Node.js CLI that generates QR codes as ASCII art with PNG export; fully offline, MIT-licensed, distributed via npm and GitHub

Tally Habit Tracker | tally.aahmed.ca

- Built and published a privacy-first iOS habit tracker (Swift/SwiftUI, SwiftData, WidgetKit, Live Activities, CloudKit sync) with three habit types, flexible scheduling, streak heatmaps, inline notification actions, and Google Reminders import; zero telemetry, no third-party SDKs

EDUCATION

Master of Science (M.S.) Cybersecurity & Information Assurance | Western Governors University

Awarded 2024

Bachelor of Computer Science (BCompSci) | Dalhousie University

Awarded 2024

CERTIFICATIONS

AWS Certified Solutions Architect & Developer - Associate

Awarded 2022

Certified Information Systems Security Professional (CISSP)

Awarded 2026

Systems Security Certified Professional (SSCP)

Awarded 2023