

Jacob Urmanec

Software Engineer

Cloud-native systems · AWS · workflow & operational reliability

[linkedin.com/in/jacoburmanec](https://www.linkedin.com/in/jacoburmanec)

Summary

Software engineer with 6+ years owning cloud-native middleware, workflow orchestration, and operational systems in large-scale telecom environments. Proven in AWS serverless architectures, event-driven design, observability, and regression depth. Building independent portfolio tracers (orchestration, anomaly monitoring, industrial edge-to-cloud) to deepen capabilities in reliability engineering, MLOps, and automation.

Professional Experience

Engineer 3, Software Development and Engineering

Comcast | Aug 2021 – April 2026

- Led the launch of the **AWS Serverless Fulfillment 2.0 API**, replacing legacy billing systems and enabling company-wide adoption of modern architecture.
- Reduced BI sync latency by **96%** by integrating Pickup In-Store Middleware with Customer Timeline, Inventory, and DX DataLake, enabling real-time tracking and notifications.
- Collaborated with senior leadership to address system inefficiencies, eliminating unclaimed device dwell and improving operational performance.
- Worked with cross-domain architects to define functional requirements, authored detailed design documents, and mentored team members on modern **CI/CD pipelines** with automated regression testing, enhancing system reliability and delivery speed.

Application Engineering Analyst

Accenture (Comcast project) | Sep 2020 – Aug 2021

- Enhanced **In-Store Pickup systems**, integrating Retail and Order Entry platforms, driving nationwide adoption of 'Scan and Pack' and reducing unclaimed order dwell time by **43%** (7 to 4 days).
- Optimized **Service Fulfillment systems**—tuned Lambda memory, replaced Kafka with Kinesis, and upgraded Elasticsearch—improving cost, security, and reliability.

Full Stack Software Developer

Revature → Accenture (Comcast project) | Feb 2019 – Sep 2020

- Acted as sub-lead for Comcast's **In-Store Pickup Middleware**, boosting unit test coverage to **94.2%** (JUnit, SonarQube), automating routine biller processes, and implementing business logic like order enrichment and order auto-cancellation.
 - Built observability tools (**Tableau, Kibana, Grafana**) and collaborated on a **Kinesis logging POC**, enhancing system monitoring and performance.
-

Selected work

Portfolio (independent — not client engagements)

- **Anomaly monitoring system** — Configurable monitoring over time-series observations with alerting and an operator console.
- **Industrial cell telemetry bridge** (*exploratory*) — ROS 2 / C++ edge path into a thin AWS ingest floor.

Production-related (employment)

- **Fulfillment 2.0 API launch** — Led release of a next-gen orchestration path with black-box regression coverage for stability.
 - **Metrics-Center bulk-update API** — Spring Boot microservice (Java, MongoDB) for routine key rotation.
-

Skills

- **Cloud (production):** AWS (Lambda, SQS, Kinesis, DynamoDB, Step Functions, CloudFormation, S3, API Gateway)
 - **Languages (production):** Java (primary); JavaScript; limited Python / PL/SQL / Shell
 - **Languages / frameworks (portfolio):** C++20, ROS 2 / rclcpp (Industrial cell telemetry bridge)
 - **Frameworks & tools:** Spring Boot, Serverless Framework, Node.js, Docker, Gradle, Maven, Concourse, Git
 - **Testing / security:** JUnit, Mockito, SonarQube, Checkmarx, Mend; post-deploy smoke / regression practice
 - **Observability:** CloudWatch, Grafana, Kibana, Elasticsearch, Tableau
-

Education

B.S., Civil Engineering & B.A., International Studies

University at Buffalo, The State University of New York