

# Tirth Shah (PMP®)

[shahtirth0307@gmail.com](mailto:shahtirth0307@gmail.com) | +1(226)724-2781 | [linkedin.com/in/tirth-shah](https://www.linkedin.com/in/tirth-shah) | [tirthshah.xyz](https://tirthshah.xyz)

## Professional Summary

---

Systems operations engineer with 5+ years combining software triage and data analysis with cross-functional program execution across connected and automated vehicle programs. Proven track record leading root causing efforts — triaging issues, driving containment, and ensuring long-term resolution — while using data, tooling, and structured triage practices to keep leadership and cross-functional teams aligned on software quality and launch readiness. Deep experience defining and improving triage workflows, tracking issue containment, escalation, and long-term corrective actions, and developing scalable dashboards that measure and forecast software quality. Proficient in Python and SQL with working knowledge of C++ for issue investigations, automation, and reporting. Daily practitioner of AI/LLM-assisted log analysis, anomaly detection, automated summarization, and tool creation. Thrives in collaborative, high-stakes, time-critical environments, exercising independent judgment and translating complex technical problems into clear actions for diverse audiences.

## Skills

---

- **Triage & Software Quality:** Structured Triage Practices, Triage Workflow Definition & Improvement, Issue Ownership/Classification/Prioritization (Test & Production Environments)
- **Programming & Data Analysis:** Python, SQL, C++ , Data Ingestion/Normalization/Correlation, TypeScript, JavaScript, REST APIs, Automation Scripting
- **Observability, Visualization & Tooling:** Splunk (dashboards & data insight), Power BI, GitHub, Grafana, AWS (CloudWatch, S3, EC2), Azure, Scalable Tool & Dashboard Development, ServiceNow, Jira, Confluence
- **AI/ML & LLM Tooling:** LLM-assisted Log Analysis, Anomaly Detection, Failure Clustering, Automated Summarization, AI-powered Tool Creation (Claude, OpenAI API, Microsoft Copilot), ML Pipeline Concepts
- **Vehicle Domain & Cross-functional Execution:** Vehicle Architecture Protocols & Standards, GNSS/GPS Corrections Services, HD Maps, External Vendor SLA Ownership, Monthly Service Reviews, Onboard/Offboard Diagnostics, Vehicle Launch Support, OTA Updates, Data-driven Technical Storytelling, APQP-PPAP trained

## Work Experience

---

### Systems Operations Engineer - Navigation Operations | Stellantis | Feb 2023 – Present

Windsor, ON

- Act as point of contact for navigation and connected-platform diagnostic issues across manufacturing, service, program leadership, and engineering — communicating technical risks, resolution progress, and recommendations that impact release decisions.
- Own the SLA with the external GNSS service provider delivering the GPS corrections feature — leading monthly service review calls, tracking service quality metrics, and maintaining external stakeholder relationships.
- Defined and improved triage workflows in ServiceNow, enabling consistent issue ownership, classification, and prioritization across test and production environments — reducing resolution time by 30%.
- Lead root cause analysis across onboard (embedded) and offboard (cloud) software components, delivering short-term containment and long-term corrective actions across vehicle programs and release milestones.
- Manage the HD Maps provider relationship supplying map data that controls ADAS-enabled road availability — coordinating data quality, release alignment, and map-related field issues through to vendor resolution.
- Ingest, normalize, and correlate data from development vehicles, plant data, and the customer feedback data using Python and SQL — creating large, usable data sets for quality analysis.
- Built and maintain Splunk dashboards tracking 50+ KPIs to identify trends, measure and forecast software quality, and provide leadership timely visibility into released software quality — including a Unified Ops Metrics application normalizing ticket data from four portals.
- Utilize LLMs and AI tooling daily for log analysis, anomaly detection, failure clustering, and automated summarization.
- Lead ADAS Ops execution across 3 concurrent vehicle programs globally — supporting vehicle launch activities, OTA update deployments, and coordination with manufacturing plants and service/brand quality organizations.
- Exercise independent judgment in ambiguous, time-critical situations — leading a 5-person cross-functional team and driving alignment across diverse stakeholders.

## **Software Developer Engineer 1 | Amazon Inc. | *Sept 2022 – Dec 2022***

*Vancouver, BC*

- Developed end-to-end SLA monitoring pipeline using TypeScript microservices with AWS CloudWatch metrics and anomaly detectors — analytical and debugging experience in real-time distributed software systems at Tier-1 scale.
- Applied software development lifecycle, release processes, and software quality practices while investigating production issues across globally distributed services.

## **Project Engineer | Keepsake Automation LLP | *Apr 2019 – Feb 2021***

*Ahmedabad, India*

- Performed hardware and software diagnostics on automated production systems, debugging integrated CNC stacks and delivering corrective actions from containment through permanent resolution.
- Engineered Python-based Nesting optimization modules achieving 25% material savings, building automated data acquisition and reporting pipelines.

## **Education**

---

Master of Electrical and Computer Engineering *Windsor, ON*

*University of Windsor*

Bachelor of Technology — Instrumentation and Control *Ahmedabad, IN*

*L.J Institute of Engineering and Technology*

## **Certifications**

---

Project Management Professional (PMP) — *Project Management Institute*

PG Diploma – Industrial Systems Automation — *Prolific Systems & Technologies*

## **Projects — AI Tooling & Data Systems**

---

Unified Ops Metrics Tool — Software Quality Dashboard Application

*Stellantis Internal*

- Designed and built a browser-based application that ingests, normalizes, and correlates ticket data from four operational portals into a unified severity/status framework with executive quality dashboards — scalable tooling for software quality visibility.

Enerwyse — IoT Data Platform with ML Forecasting

*Personal Project*

- Building a data platform with sensor ingestion, normalization pipelines, a feature store, ML-driven forecasting, and real-time visualization dashboards — plus an agentic AI automation workflow (Claude Cowork) for document processing.

InspireNest — AI Optimization Platform

*Personal Project*

- Delivered full-stack optimization platform (FastAPI + Python + React + Docker CI/CD + GitHub) achieving 13% utilization gain — hands-on tool creation from data analysis through deployment.