



Suhas Bhairav

AI Weather Disruption Shipping Rerouting Flow

**AI-guided rerouting for shipping resilience amid
weather disruptions**

Empower dispatch to auto-suggest alternative routes
with weather-aware AI in real time.

Suhas Bhairav

suhasbhairav.com

Scope & Goals

Define the domain: which manifests, weather feeds, and routing decisions will be included. Establish success metrics and the boundary between AI suggestions and human approval.

Key move Pilot three lanes with reliable feeds this week to establish baseline.

PRACTICAL CHECKLIST

- 01** Identify the active manifests to monitor and the weather feeds to subscribe to.
- 02** Define which routing decisions AI can auto-suggest and which require human approval.
- 03** Set success metrics: on-time delivery, reroute accuracy, and average delay reduction.
- 04** Choose a primary planning tool and confirm data access for the ops team.
- 05** Assign ownership: who approves changes, who can override, and how logs are maintained.
- 06** Outline minimum data quality requirements: timeliness, completeness, and weather alert specificity.

Suhas Bhairav AI Resource

Empower dispatch to auto-suggest alternative routes with weather-aware AI in real time.

What to Automate vs Human Review

Map decision points where automation adds value and where human oversight remains essential. This page aligns data, signals, and control boundaries for quick wins.

Key move Ensure a human-in-the-loop during the initial two sprints.

PRACTICAL CHECKLIST

- 01** Automate manifest-to-route matching: ingest live manifests, weather alerts, and typical congestion patterns.
- 02** Auto-suggest top 3 alternative routes with estimated time and fuel impact.
- 03** Human review at first-mile changes: dispatchers verify routes with local constraints.
- 04** Weather data normalization: unify sources, units, and alert severity for consistency.
- 05** Data provenance: track decisions, timestamps, and versions for auditability.
- 06** Tooling: leverage existing routing system; avoid new silos.
- 07** Monitoring: real-time dashboards for miss vs. match and alert drift.

Suhas Bhairav AI Resource

Empower dispatch to auto-suggest alternative routes with weather-aware AI in real time.

Release & Metrics

Outline a weekly, low-friction rollout plan with small experiments and clear ownership. Define metrics to demonstrate ROI, reliability, and safety, with regular reviews.

Key move Document decision logs and ensure the dispatcher remains the primary operator.

PRACTICAL CHECKLIST

- 01** Week 1: connect data sources, validate feeds, and run offline tests with historical manifests.
- 02** Week 2: enable auto-suggest in staging; humans review before production reroutes.
- 03** Week 3: roll to 1-2 lanes; monitor KPIs.
- 04** Ongoing ownership: assign the dispatcher tech lead, data engineer, and compliance owner.
- 05** KPIs: on-time delivery, reroute adoption rate, forecast accuracy, and incident-free escalation.
- 06** Risks and guardrails: weather anomalies, data gaps, over-reliance, and chain-of-custody.
- 07** Approval workflow: change controls, review gates, and versioning of routing logic.

Suhas Bhairav AI Resource

Empower dispatch to auto-suggest alternative routes with weather-aware AI in real time.

ABOUT THE CREATOR

Suhas Bhairav

I build AI systems that combine distributed architecture, retrieval, knowledge graphs, security, and practical workflow design. My focus is AI that can be used repeatedly by real teams: understandable, reliable, and grounded in the work people already do.

EXPERTISE

- Principal systems architecture and applied AI engineering
- Production-grade AI systems, agentic workflows, RAG, and knowledge graphs
- Full-stack workflow applications across AWS, Google Cloud, Azure, on-premise, and hybrid environments
- Practical AI implementation patterns for automotive, manufacturing, finance, logistics, cybersecurity, sales, and customer operations
- Security, governance, observability, approvals, and failure-mode thinking for operational AI systems

WEBSITE

suhasbhairav.com

EMAIL

suhasbhairav@gmail.com