HYPOTENUSE ANALYTICS

PREDCIT PROTECT VERIFY

THE SHORTEST PATH FROM COMPLEX SIGNAL TO ACTIONABLE TRUTH – BEFORE RISK BECOMES REALITY

The Problem

CURRENT SYSTEMS ARE FAILING

Critical Infrastructure Intelligence

WE FIX AFTER COLLAPSE

CHECK TWICE A YEAR: BRIDGES CRACK BETWEEN INSPECTIONS. NOBODY SEES IT COMING.

DATA STUCK IN DIFFERENT PLACES: SENSORS HERE, PAPERS THERE. NO ONE SEES THE FULL PICTURE.

BUILDING PHASE IS A BLIND SPOT: MONITORING STARTS AFTER CONSTRUCTION ENDS. THE REAL CAUSE OF FUTURE FAILURE IS ALREADY LOST.

LIVE CONSTRUCTION MONITORING SKIPPED: MOST SYSTEMS WATCH SCHEDULES, NOT STRUCTURE — SITE ACTIVITY AND STRUCTURAL BEHAVIOR STAY DISCONNECTED.

3D MODELS DON'T DO ANYTHING: THEY LOOK REAL. CAN'T TELL YOU WHAT HAPPENS IF MORE TRUCKS ROLL ON TODAY.

Surveillance Intelligence Lab

CAMERAS DON'T STOP CRIME

TOO MANY FAKE ALARMS: WIND AND SHADOWS SET OFF ALERTS. GUARDS STOP CARING. REAL DANGER GETS MISSED.

PEOPLE CAN'T WATCH 40 SCREENS: FOCUS DROPS AFTER 20 MINUTES. NO ONE CAN TRACK THAT MANY CAMERAS.

FINDING WHAT HAPPENED TAKES HOURS: ONE EVENT, TEN CAMERAS. SOMEONE PULLS CLIPS BY HAND. TOO LATE.

SENDING VIDEO TO CLOUD IS SLOW: FOOTAGE LEAVES THE SITE. TAKES TIME. BREAKS DATA RULES.

Reality Trust Centre

AI FAKES. WE DON'T CATCH.

FRAUD HAPPENS LIVE: FAKE VOICE ON A BANK CALL. MONEY GONE. CHECK LATER = TOO LATE.

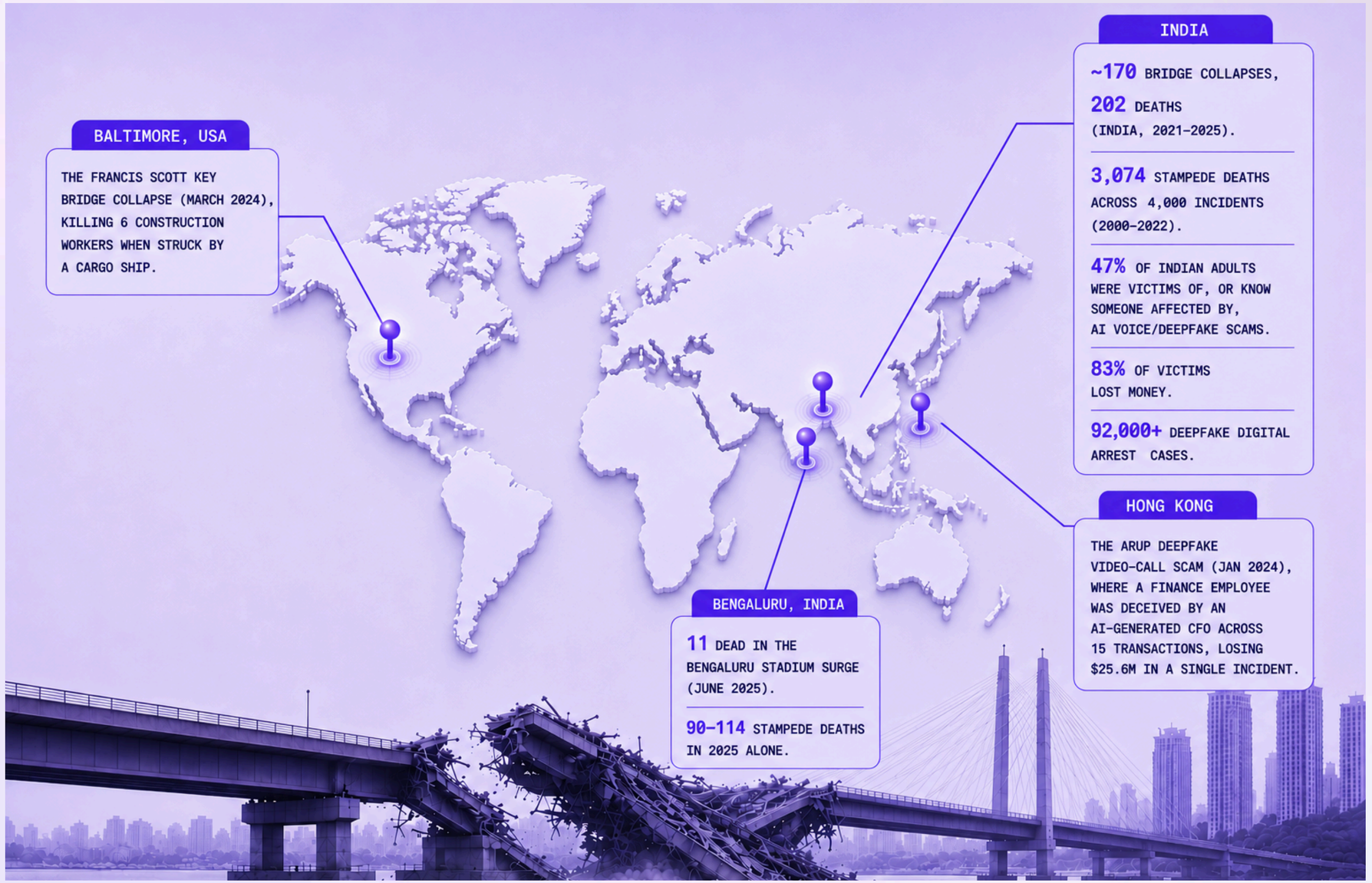
FAKE PAPERS LOOK REAL: BANK STATEMENTS, ID CARDS — AI MAKES THEM FROM SCRATCH. VIDEO TOOLS CAN'T CATCH THESE.

DETECTORS ONLY KNOW OLD FAKES: NEW AI GENERATOR NEXT MONTH. OLD TEST SCORES MEAN NOTHING.

LAW SAYS PROVE IT: INDIA NEEDS LABELS AND PROOF FOR AI CONTENT. REAL OR FAKE GUESS IS NOT ENOUGH.

The Stakes

THE PATTERN: SENSORS DEPLOYED. DATA GENERATED. INTELLIGENCE TO FUSE, PREDICT, AND ACT — MISSING IN ALL THREE.



Our Solution

ONE PLATFORM THREE INTELLIGENCES

CRITICAL INFRASTRUCTURE INTELLIGENCE

80–90% | ON-EDGE PROCESSING

LIVE CONSTRUCTION MONITORING:
AI + sensors track every stage in real time.
Detect risks before they become failure.

STRUCTURAL HEALTH INSIGHTS:
Vibration, strain, displacement & thermal data analyzed 24x7.
Early warning for stress & fatigue.

DIGITAL TWIN SIMULATION:
Physics-enforced models + LiDAR + InSAR predict how structures behave under real-world loads.

RISK SCORING & ALERTS:
AI prioritizes critical issues.
Actionable alerts to prevent collapse.

COMPLETE LIFECYCLE RECORD:
One view. All data. From foundation to operations. No data gaps.

SURVEILLANCE INTELLIGENCE LAB

<150 ms | REAL-TIME ALERT LATENCY
2-3 latency

24x7 AI VIDEO ANALYTICS:
Detects fights, fire, loitering, objects, crowd surges & more in real time.

CROWD & BEHAVIOUR INTELLIGENCE:
Counts, density, flow, dwell time & anomaly detection across zones.

ALERTS THAT MATTER:
Smart, contextual alerts to the right person at the right time.

SEARCH THAT FINDS:
Search across faces, objects, vehicles & attributes in seconds.

EVIDENCE THAT HOLDS:
Forensically valid clips. Auto timeline. Chain of custody. Court ready.

REALITY TRUST CENTRE

90% | DEEPFAKE DETECTION ACCURACY
(MULTI-DATASET BENCHMARK, 2026)

DEEPFAKE & AI DETECTION:
Detects faces, voices, documents & videos generated by AI.

SOURCE AUTHENTICATION:
Verify origin of content, device, camera & editing history.

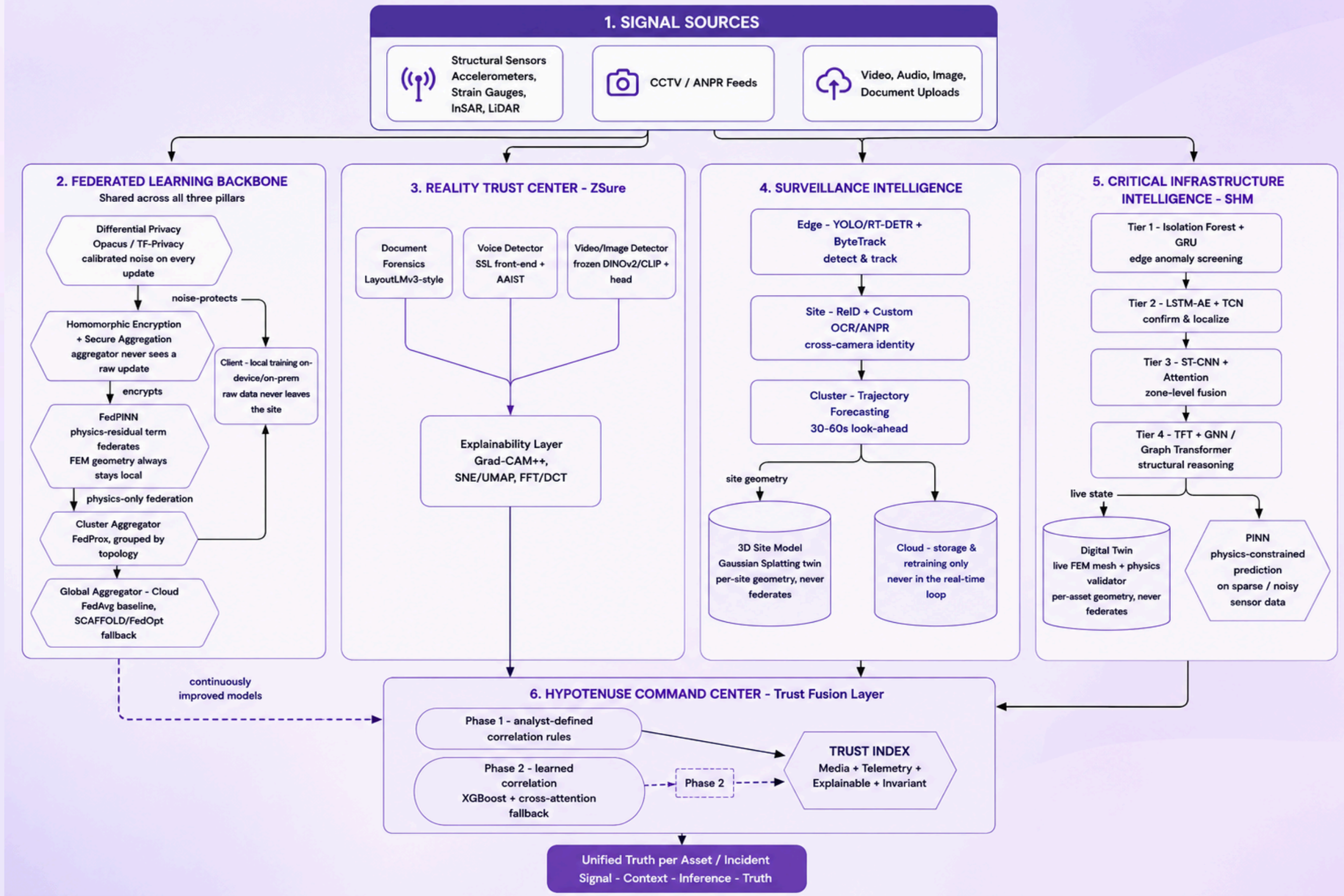
DOCUMENT & IMAGE FORENSICS:
Metadata, tampering, compression, cloning & manipulation checks.

VOICE & BIOMETRIC VERIFICATION:
Voiceprints, liveness & biometric matching to stop identity fraud.

TRUST SCORE & REPORTS:
Human-readable reports with explainable AI + court-grade proof.

The Architecture

THREE VERTICALS



Why Us?

Trust Index

01

COMBINES DATA FROM MULTIPLE SOURCES INTO ONE TRUSTED HEALTH SCORE.

Physics-Constrained AI

02

VALIDATES EVERY AI PREDICTION WITH ENGINEERING RULES BEFORE GENERATING AN ALERT.

Edge-First & Hardware-Agnostic

03

WORKS WITH EXISTING CAMERAS AND SENSORS, PROCESSING **80–90% OF DATA AT THE EDGE** FOR FASTER, SECURE, AND LOW-COST MONITORING.

Full Lifecycle Intelligence

04

MONITORS INFRASTRUCTURE FROM CONSTRUCTION TO DAILY OPERATIONS ON A SINGLE PLATFORM.

End-to-End Accountability

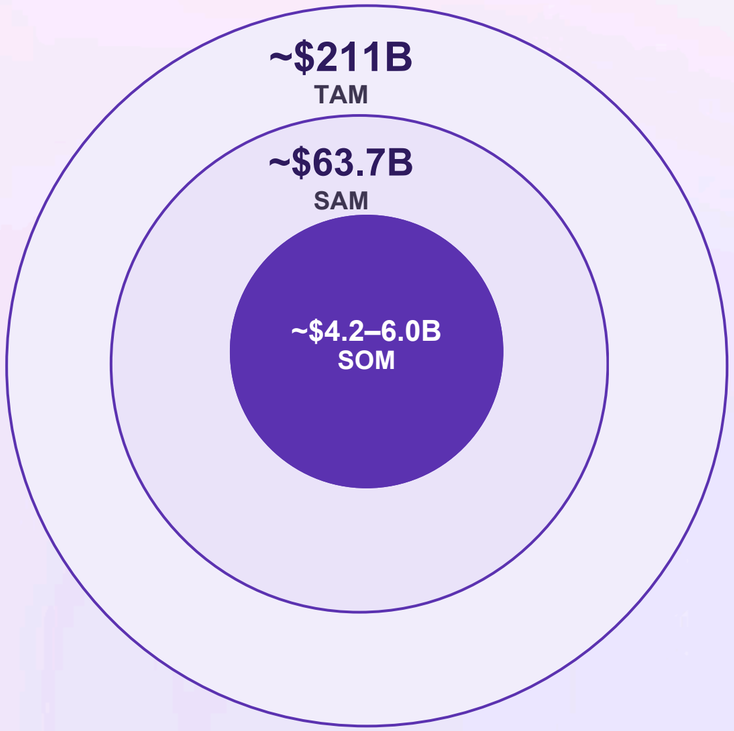
05

EVERY ALERT IS RECORDED, ASSIGNED, AND TRACKED UNTIL IT IS RESOLVED.

Market Analysis

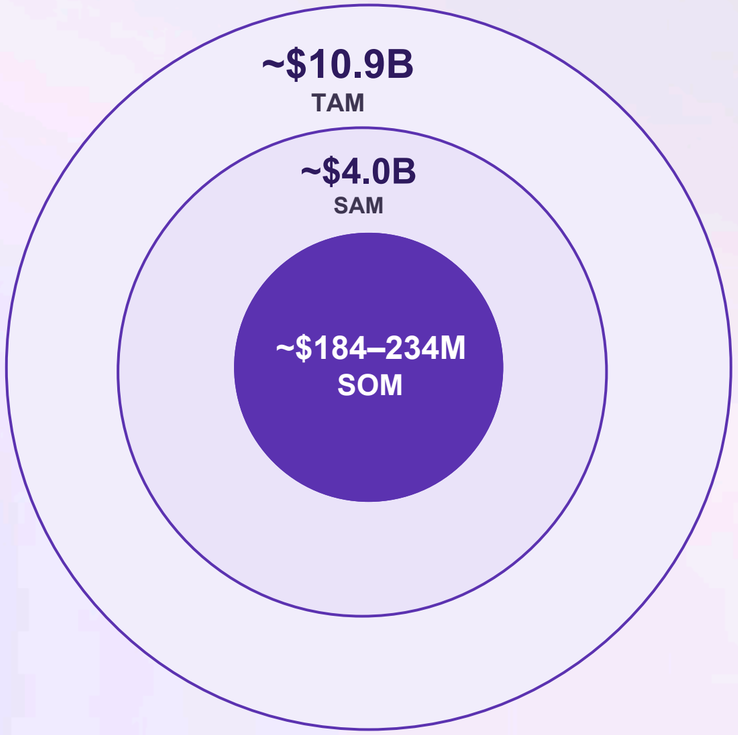
LARGE AND GROWING MARKETS ACROSS STRUCTURAL HEALTH MONITORING,SURVEILLANCE INTELLIGENCE, DEEPFAKE DETECTION, AND DIGITAL TWIN TECHNOLOGIES.

GLOBAL OPPORTUNITY



TAM Total Addressable • **SAM** Serviceable Addressable • **SOM** Obtainable (3–5yr)

INDIA OPPORTUNITY



TAM Total Addressable • **SAM** Serviceable Addressable • **SOM** Obtainable (3–5yr)

COMBINED SOM ACROSS ALL THREE DOMAINS

GLOBAL COMBINED SOM

~$4.2–6.0B

$2.3B Critical Infra + $1.8–3.6B Surveillance + $80M Deepfake Detection

INDIA COMBINED SOM

~$184–234M

$125M Critical Infra + $50–100M Surveillance + $9M Deepfake Detection

INDIA SHARE OF GLOBAL SOM

~4.3–4.4%

India combined SOM ÷ global combined SOM — tracks India's ~5% share of global AI/tech spend (IDC)

Competitive Matrix

Parameters	Staqu(Jarvis)	Vehant	Reality Defender	Pindrop	SPPL India	DYWIDAG	Hypotenuse Analytics
Structural Health Monitoring	❌	❌	❌	❌	✅	✅	✅
Surveillance Intelligence	✅	✅	❌	❌	❌	❌	✅
Deepfake Detection	❌	❌	✅	✅	❌	❌	✅
Multi-modal AI Fusion	❌	✅	❌	❌	❌	❌	✅
Edge AI Deployment	✅	❌	❌	❌	✅	✅	✅
Digital Twin Integration	❌	❌	❌	❌	❌	✅	✅
Unified AI Platform	❌	❌	❌	❌	❌	❌	✅

Our Roadmap

From Beta to Unified Platform — 2026

August 2026
Phase 1

September 2026
Phase 2

October 2026
Phase 3

December 2026
Phase 4

Reality Trust Center Beta

- Deepfake & synthetic-doc detection
- Probability score + visual evidence
- Browser/app point-of-use extension

Surveillance Intelligence MVP

- Trajectory forecasting (30–60s)
- Multi-camera correlation
- High-speed ANPR & alert close-out

Critical Infrastructure MVP

- Multi-modal sensor fusion + InSAR
- Live Factor of Safety & RUL
- Construction Context Engine

Unified Platform

- Common event schema, one console
- Cross-module correlation rules
- Trust Index live on pilot site

Our Team

Harsh Vardhan
Founder & Chief Vision Architect

Devanshi Jaiswal
Co-Founder & Builder

Prakher Saxena
Co-Founder & Alchemist

Rakshitha
Multi-ModalWizard

Gyanendra Prakash
AI Systems Sorcerer

Anvesh Mishra
Cool Stack Sorcerer

Lakshit Gupta
Cloud & AI Orchestrator

Ansh Kumar
Intelligent Systems Architect

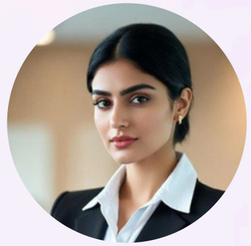
Satveek
Backend & Cloud Intern

Aravind Lochanan
Edge AI Architect

Abhijit Maity
InSAR Lead

Raman Gupta
Moment Capturer

Shyam Narayan Nayak
CoreTechnology Alchemist



Meera AI
Chief Agentic Architect

Shivam
AI Product Engineer

Advisory Board Members

Prof. Pratyush Pranav

Assistant Dean, School of Artificial Intelligence, Bennett University

Simons-Ashoka fellow, Ashoka University

PhD, Cosmology & Topology — University of Groningen

Postdoctoral Fellow, Technion – Israel Institute of Technology

Research: Topological Data Analysis of the Cosmic Web, Cosmology & Dark Matter

Dr. Arnav Bhavsar

Professor at Indian Institute of Technology Mandi

PhD, IIT Madras

Postdoctoral Fellow, GE Global Research

Postdoctoral Research Associate, UNC Chapel Hill

Research: Computer Vision, Medical Image Analysis, Biosignal analysis

Nripesh Jha

PhD Research Scholar at IIT Delhi — Structural Health Monitoring

M.Tech, Structural Engineering, IIT Patna

Design & detailing of 76 bridges, World Bank–funded Kamala–Dhalkebar–Pathlaiya project, Nepal

Research: AI/ML for Damage Detection, Digital Twins for Bridges

Ranjeet Tiwari

Researcher, University of Adelaide — Defence-Aligned Research (DSTG Collaboration)

PhD, Nonlinear State Estimation & Tracking, IIT Patna

Visiting PhD, Electrical & Computer Science, McMaster University, Canada

Research: Bayesian Estimation, Multi-Object Tracking, Sensor Fusion for Autonomous Systems

THANK YOU

Any Questions?

info@hypotenuseanalytics.com

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