When News Meets Satellites Meets AI 🛰️

Building an OSINT Fusion system

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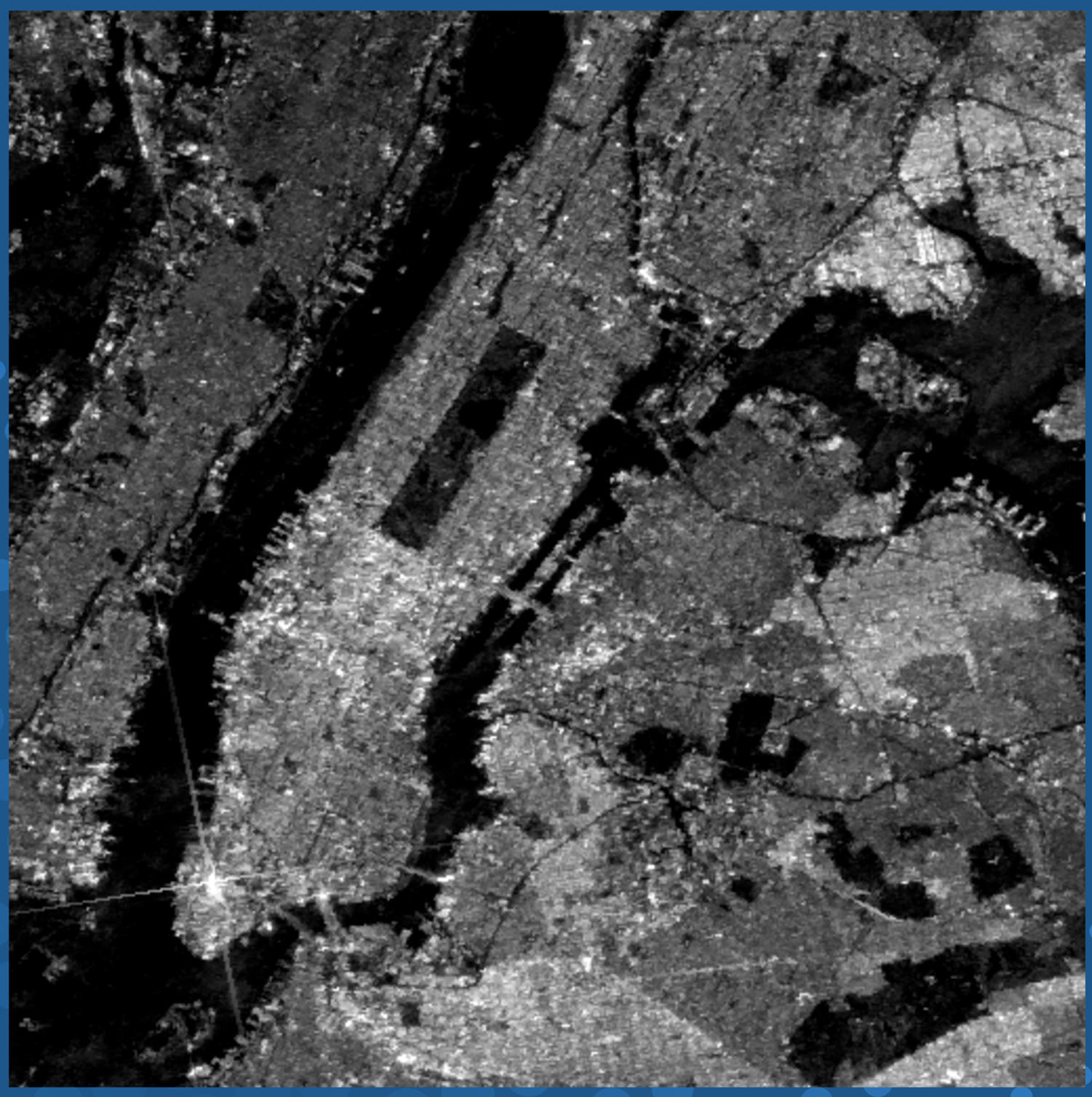
The Idea

What if we fused them?

- News
- Satellite imagery
- AI reasoning

Over the past few days, I've been building a local OSINT Fusion Pipeline that brings together three worlds that usually live apart.

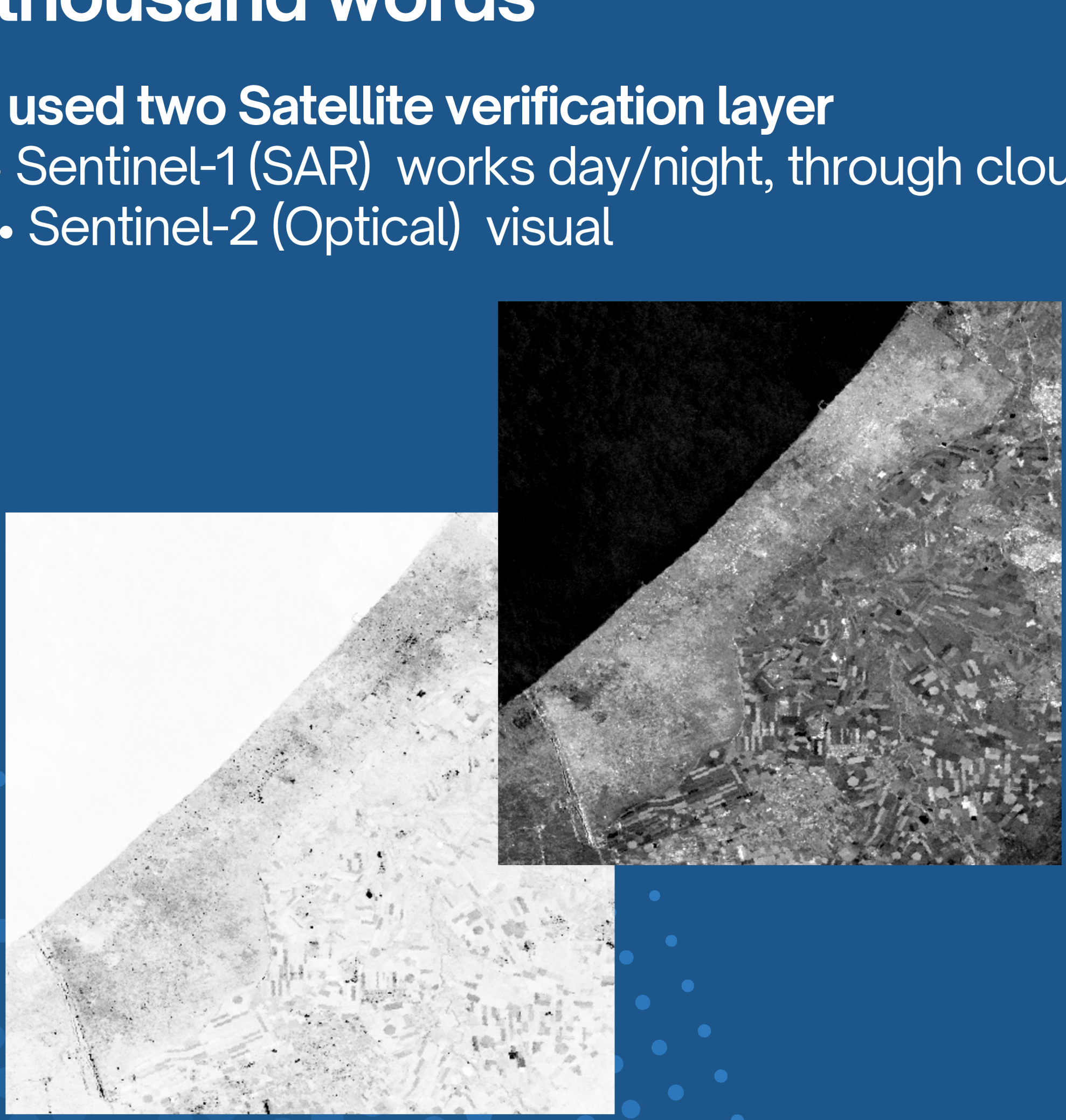


NYC from sentiel satellite

they say “an image is worth a thousand words”

I used two Satellite verification layer

- Sentinel-1 (SAR) works day/night, through clouds
- Sentinel-2 (Optical) visual



gaza strip from both satellite 1 and 2

News Ingestion

News isn’t just headlines

- Multi-source (12 global news outlet)
- Keyword-targeted ingestion
- Historical baseline via NYT Archive
- Credibility weighting per source

AI ≠ predictions. AI = signal extraction

AI models used for:

- Event classification (zero-shot)
- Urgency & sentiment detection
- Situation summarization
- Outcome hypotheses (not facts)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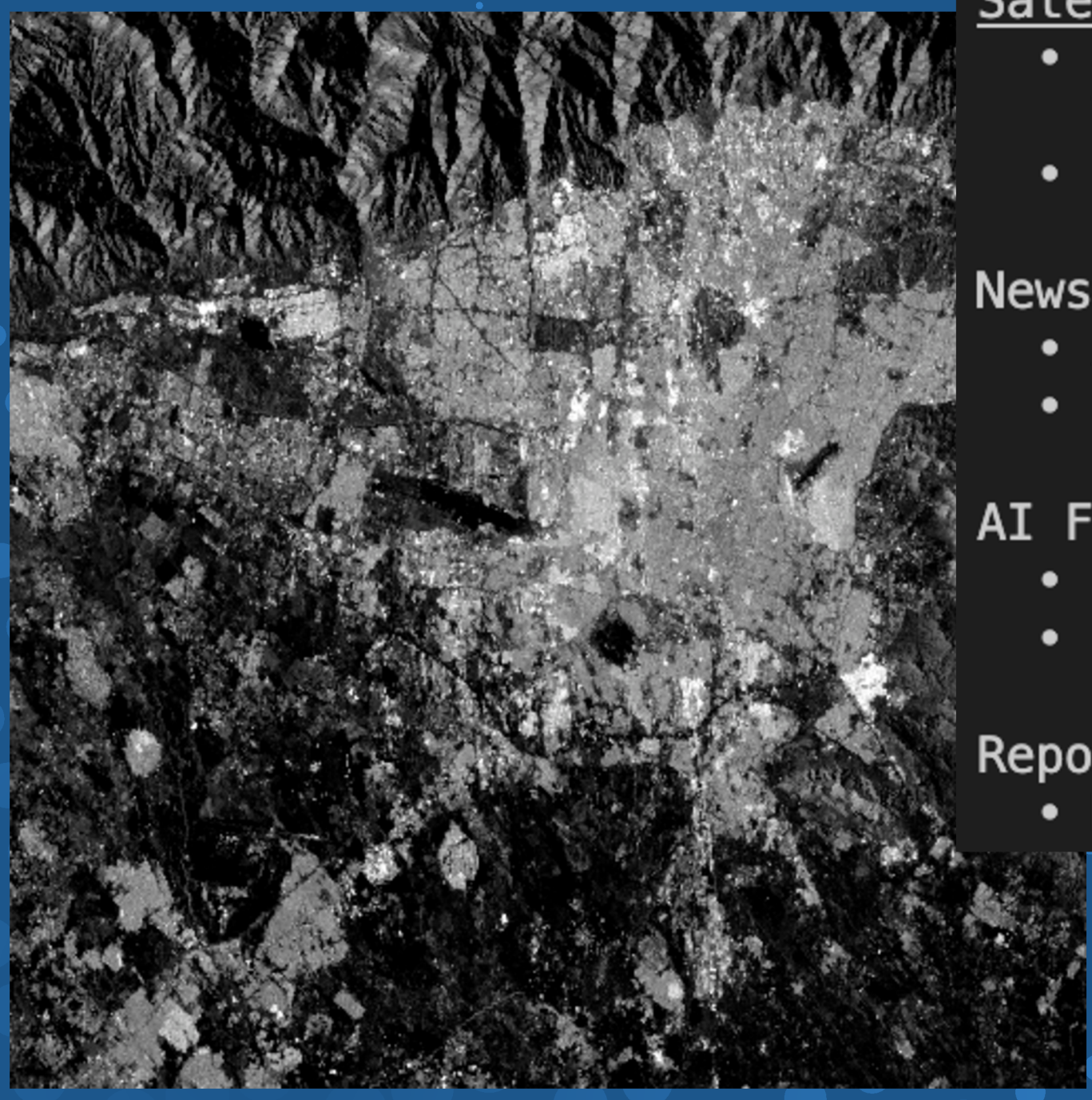
Tech stack (for the curious)

- Python
- Hugging Face Transformers (zero-shot, sentiment, summarization)
- Copernicus / Sentinel Hub - images
- RSS + NYT Archive and other open news api
- Rule-based + AI hybrid reasoning for tuning.



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Satellite Imagery:
   • Sentinel-1 SAR: OK
     Visualization: my_analy
   • Sentinel-2 Optical: OK

News Coverage:
   • Articles collected: 30
   • Event claims: 30

AI Forecast:
   • Status: ok
   • Confidence score: 1.0

Reports Generated:
   • Markdown report: my_ana
```

Tehran image

Why This Matters

OSINT should be:

- ✓ Verifiable
- ✓ Reproducible
- ✓ Explainable
- ✓ Cross-domain