01.02.2026

Envelope.

Right before the edge.

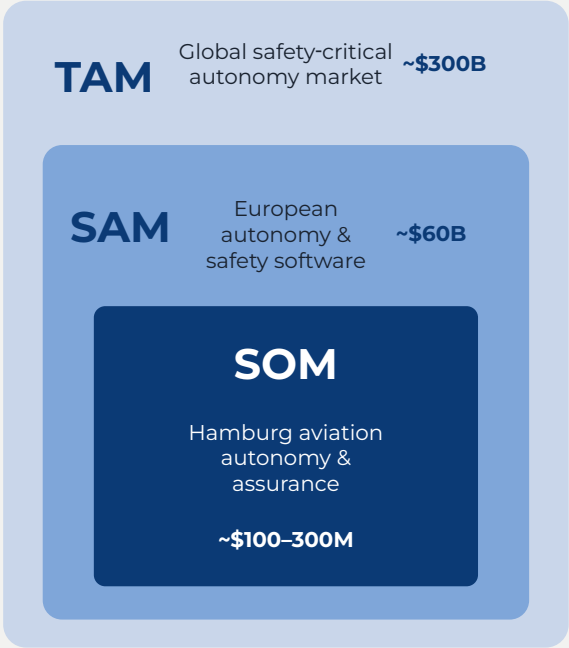
Derin Bilgin

Market.

Autonomous systems are entering the real world, but safety is still handled with static tools in a dynamic environment.

How the market solves?

- **Design-time safety analysis** proves safety on paper but can't adapt after deployment.
- **Offline testing and simulation** cover known cases but miss real-world uncertainty.
- **Conservative operating limits** reduce risk by reducing autonomy.
- **Blunt runtime safeguards** rely on shutdown instead of control.



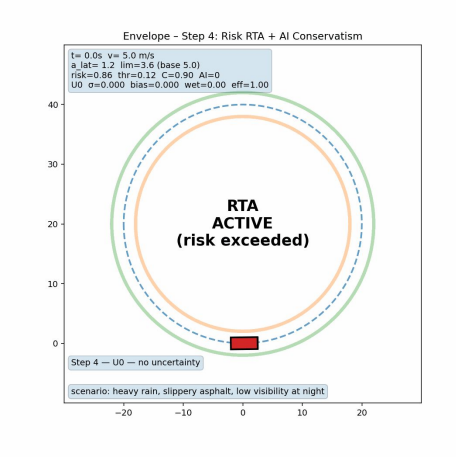
Why are these failing?

- **Static safety assumptions** fail as conditions change.
- **Long-tail failures** remain unavoidable.
- **All-or-nothing intervention** leaves no middle ground.
- **Fragmented tooling offers** no real-time safety answer.

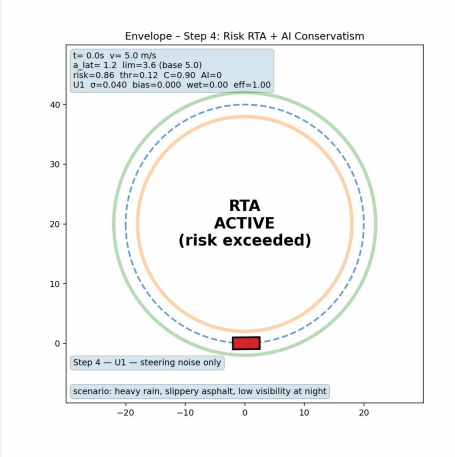
Solution: Uncertainty Ladder.

Autonomous systems × Safety assurance × AI decision support

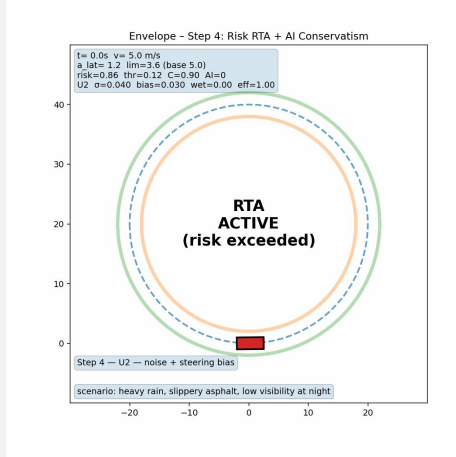
We've created an **Uncertainty Ladder** to animate our models for different uncertainty stages.



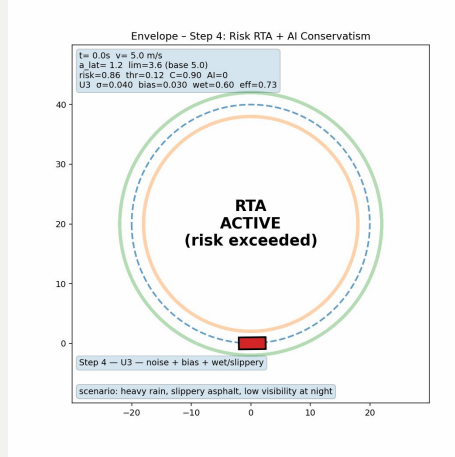
No uncertainty



Steering noise



Noise + Steering bias



Noise + Bias + Wet/Slippery

Business Model.

We operate a **B2B SaaS model** combining *annual licenses* with *usage-based pricing* to drive high-margin, recurring revenue and built-in expansion.

Base fees: $3K – $10K

Mid market: $10K - $30K ARR

Enterprise: $50K – $150K+ ARR

Annual platform license plus usage-based pricing at **$0.01–$0.05 per unit**, driving expansion as usage grows

75–90% gross margins, with **~$3K – $5K** annual variable cost on a **$20K ARR** customer, driven primarily by compute and data infrastructure; marginal cost per additional usage unit is low, enabling profitable expansion as customers scale usage.

GTM Plan.

Our target teams already doing this problem in a hacky or expensive way (custom scripts, spreadsheets, legacy tools, or in-house systems). These users already feel the pain daily and don't need education, **only a better tool**.

First 10 customers

The first 10 customers come from direct, personalized outreach by the founders to:

- People maintaining internal tools
- Teams posting jobs related to this problem
- Engineers / analysts complaining publicly (GitHub issues, Slack communities, forums)

Each message references their current setup and offers a fast, concrete win (e.g. "replace X script," "cut latency by Y," "remove manual step Z").

Advantage

- **Cost leverage:** Replaces overbuilt or custom systems with a lower-cost entry that scales with proven value.
- **Speed & simplicity:** Removes maintenance and manual work, enabling teams to go live in days.
- **Measurable impact:** Delivers immediate, quantifiable gains that make switching easy to justify.

Why Envelope? Why now?

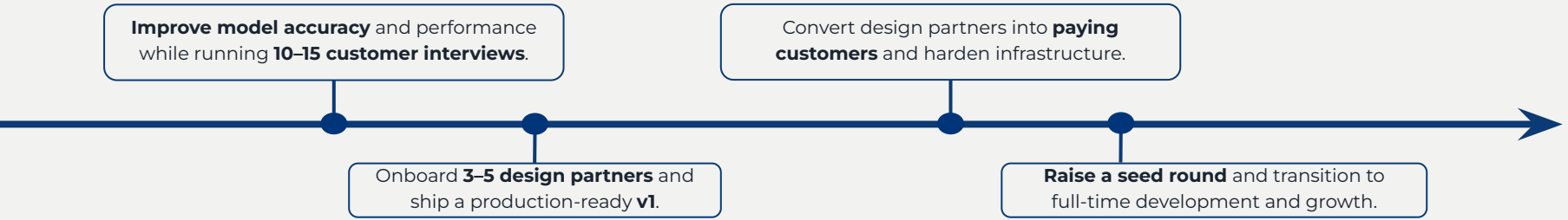
Teams still rely on fragile, custom-built systems for real-time analysis, but Envelope is here to change this by replacing internal hacks with a **scalable, off-the-shelf solution**.

Why us?

We've built and operated the core of the real-time systems, giving us first-hand experience with the tradeoffs and failure modes that existing approaches don't handle well.

What we learned?

Rapid prototyping helped us narrow the problem, remove unnecessary complexity, and show how much can be achieved quickly when AI works alongside us.



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