STYX AI

THE PROBLEM: ADAS FAILS WHEN IT MATTERS

- 21% of crashes occur in adverse weather
- Current ADAS relies on intensity-only processing
- LiDAR/Radar: $5K-$75K per vehicle
- ML models fail on edge cases they weren't trained

"When conditions get hard, current systems go blind"

ADAS Sensor Limitations: Intensity vs. Reality

WHAT CAMERAS SEE

INTENSITY ONLY

WHAT'S ACTUALLY THERE

HIDDEN INFORMATION

THE SOLUTION: ISED FRAMEWORK

"Physics-based perception from standard cameras"

NO NEW HARDWARE

Works with
existing cameras

PHYSICS NOT ML

Glass-box explainable
certifiable

REAL-TIME

Embedded
deployment ready

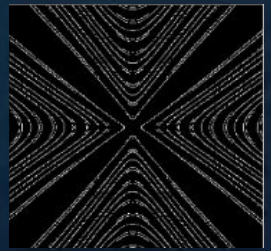
ISED SCENE ANALYSIS: EDGE DETECTION BREAKTHROUGH

ORIGINAL INPUT
(HUMAN VISION)

What YOU see

→

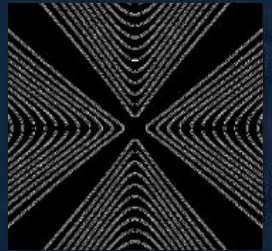
TRADITIONAL EDGE DETECTION
(Canny)



22,408 edges

→

ISED EDGE DETECTION
(ISED-EM)



37,864 edges
(+69% NEW!)

→

Information invisible to human vision, recovered by ISED-EM

ADAS FEATURES & ANALYSIS

INPUT IMAGE

LANE DETECTION

ADAS OVERLAY
(R=Wet, G=Lane, B=Fog)

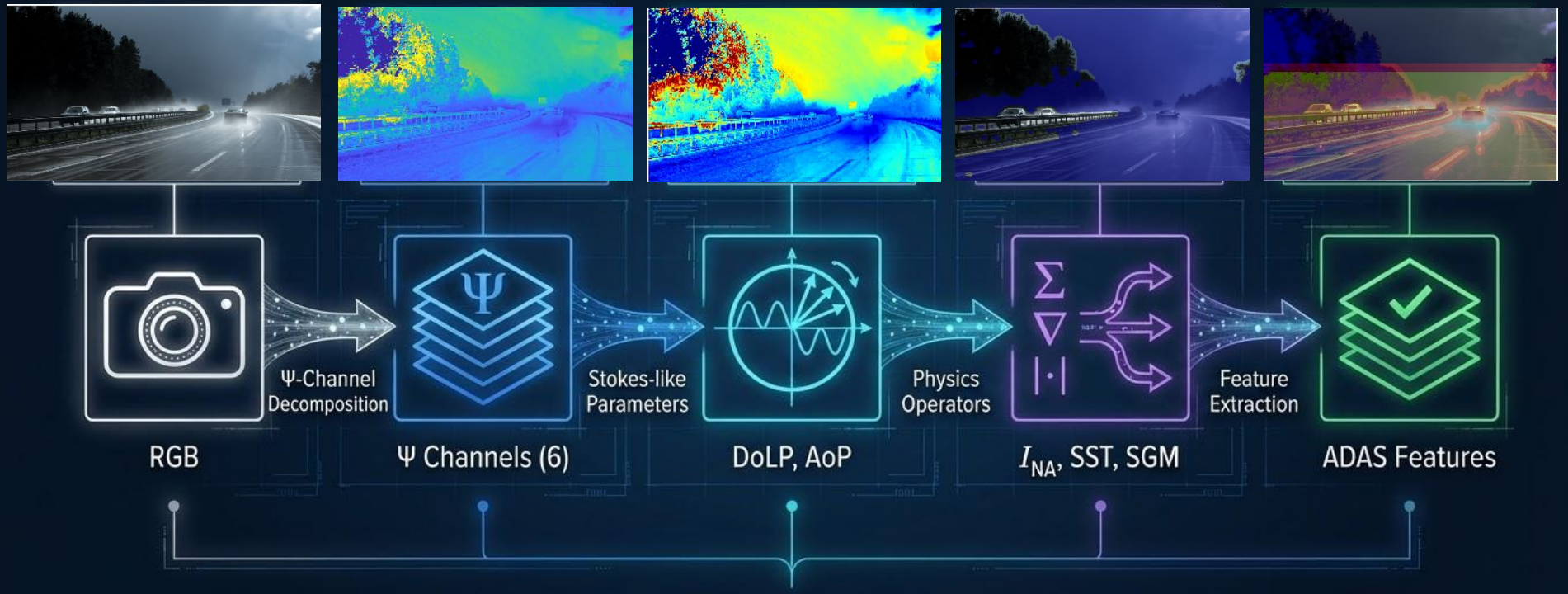
ADAS ANALYSIS SUMMARY

- Road: WET (100% wet)
- Hydroplane risk: MODERATE
- Visibility: MODERATE FOG
- Glare: MIE (Dehaze)
- Lane pixels: 24183

RECOMMENDATIONS:

- Safe speed: <60 km/h
- Headlights: LOW BEAM

HOW ISED EXTRACTS HIDDEN INFORMATION



GLASS-BOX ARCHITECTURE

"Every intermediate is physically interpretable and auditable"

BLACK BOX (what we're NOT)
OUTPUT
INPUT
VS
GLASS BOX (what ISED is)
OUTPUT
INPUT
Traditional AI - Unexplainable
ISED - Every Step Auditable

VALIDATED PERFORMANCE METRICS

EDGE DETECTION

- Grayscale: **22,408**
- ISED: **37,864**
- Improvement: **+69%**

PHYSICS VALIDATION

- Frame Bound B_0: **99.8%**
- I_NA Theory: **96.4%**
- Test Suite: **94.6%**

ADAS PERFORMANCE

- Wet Detection: **100%**
- Lane Pixels: **24,183**
- DoLP Gain: **+21.7%**

SCATTERING PHYSICS

- Mie (fog): I_NA → **0** ✓
- Fresnel: I_NA > **0** ✓
- Rayleigh: I_NA >> **0** ✓

Not simulations. Real sensor data. Reproducible results.

MARKET OPPORTUNITY

BUSINESS MODEL

B2B Technology Licensing

EVALUATION

$50K - $200K

6-12 months

PRODUCTION

$2M - $10M

+ $0.50-2/unit royalty

PLATFORM

MOST POPULAR

$25M - $75M

Full framework access

TIER-1 SUPPLIERS

- Bosch
- Continental
- Denso
- Aptiv
- ZF

CAMERA MODULES

- Sony
- OmniVision
- ON Semi
- Samsung

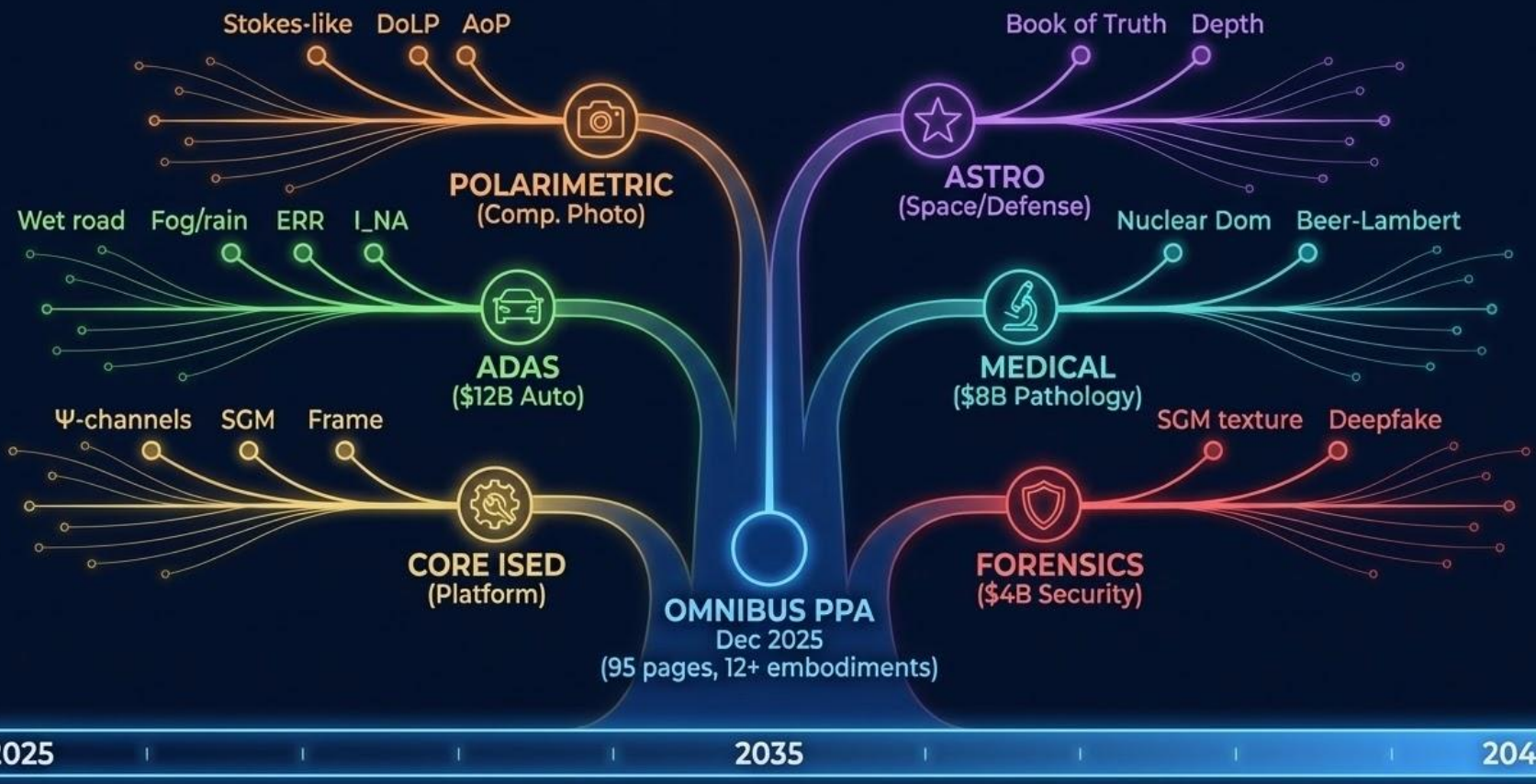
OEM DIRECT

- Tesla
- BMW
- Waymo
- GM
- Ford

COMPETITIVE MOAT: 4 WALLS

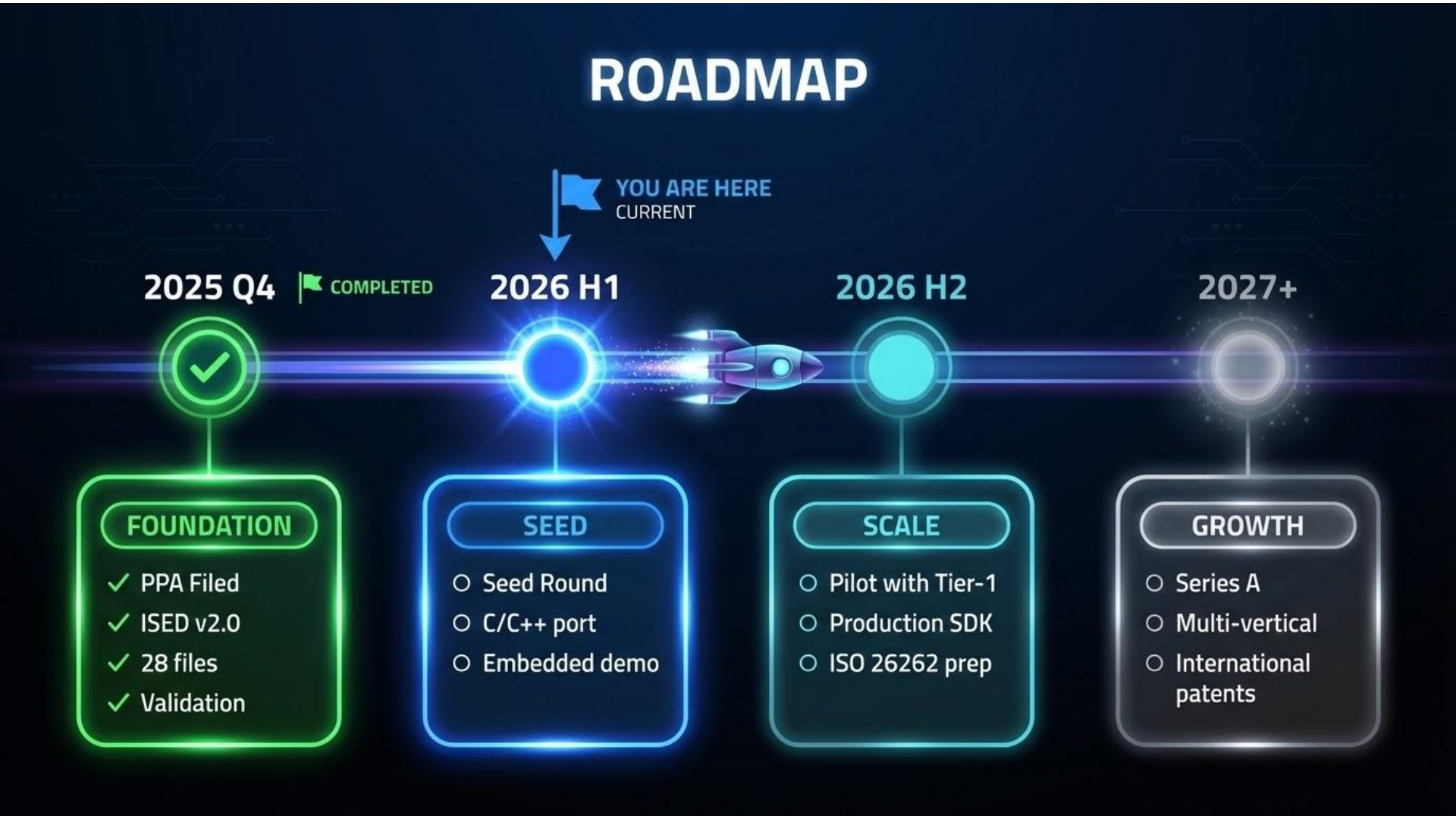
"Competitors must invent different physics. Good luck."

INTELLECTUAL PROPERTY: PATENT PORTFOLIO & DIVISIONAL STRATEGY

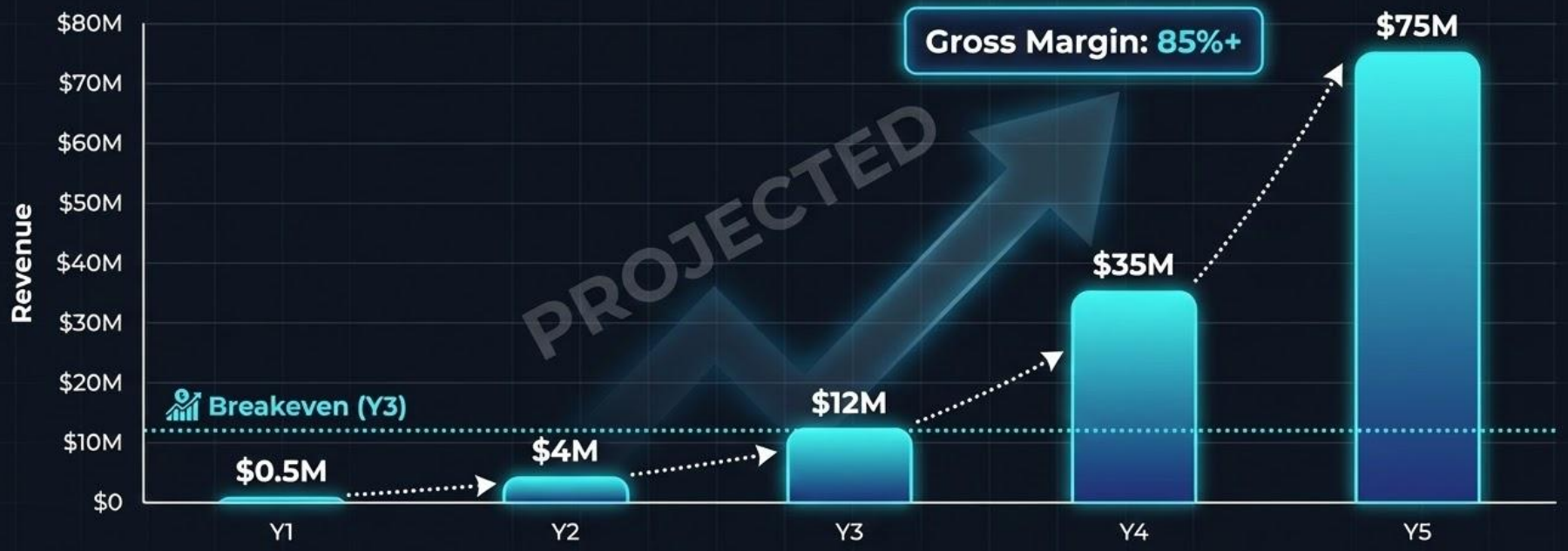


20-YEAR PROTECTION RUNWAY

ROADMAP


YOU ARE HERE
CURRENT
2025 Q4
COMPLETED
2026 H1
2026 H2
2027+
FOUNDATION
✓ PPA Filed
✓ ISED v2.0
✓ 28 files
✓ Validation
SEED
○ Seed Round
○ C/C++ port
○ Embedded demo
SCALE
○ Pilot with Tier-1
○ Production SDK
○ ISO 26262 prep
GROWTH
○ Series A
○ Multi-vertical
○ International patents

FINANCIAL PROJECTIONS



ASSUMPTIONS

[Licensing deal progression details: Tiered pricing structure, increasing adoption rates, royalty ramp-up from Y3, platform expansion in Y4-Y5.]

Technology Licenses

Royalties

$1.5 - $2.0M

SEED ROUND

18-month runway

USE OF FUNDS

MILESTONES: SDK ready | 2+ pilots | Series A positioned

Tim@styxai.com | www.styxai.com