VyO Vision – The World's First Adaptive Safety HUD

Adaptive Optics Platform for Human Visual Performance & Safety

"Show me what matters, when it matters — then get out of the way."

Continue…

Patent Pending (April 2026)

✓ HUD Projection (speed, alerts, orientation)

✓ Adaptive optical adjustment

✓ Full Orientation Tracking (pitch, roll, yaw)

✓ Approach Detection Alerts

✓ Emergency Auto-Notification (AERS)

✓ Offline Operation — no internet required

No existing HUD, ADAS system, smart glasses, or cockpit display combines all six of these capabilities.

VyO Vision introduces a new category : Adaptive Optics Safety Systems

VyO Vision

- Mission-Critical Aviation & Defense Environments
- Founder & CEO: Catherine Jones
- Innovating vision safety since 2010
- www.vyovision.com

The Problem

Every year, millions suffer accidents due to:

- Low visibility
- Poor situational awareness
- Disorientation
- Delayed response
- Difficulty seeing hazards
- Lack of emergency detection

Drivers, pilots, and astronauts often cannot see approaching danger until it’s too late.

Real Story (Emotional Impact)

- A woman crashed off an expressway bridge.
- She was trapped for **6 days**.
- Nobody could see her.
- Nobody could hear her.
- She almost died alone.

Source: ABC7 Chicago News

If she had VyO Vision, she would have been detected instantly.

VyO Vision exists to prevent situations like this.

Solution

VyO Vision is an Adaptive-optics platform that:

- - Projects critical safety info onto the windshield
- - Auto-adjusts to user’s prescription
- - Detects hazards & approaching objects
- - Alerts nearby responders automatically
- - Enhances orientation awareness
- - Works offline, everywhere

“Show me what matters, when it matters — then get out of the way.”

Key Features

- - HUD Projection (speed, orientation, alerts)
- - Adaptive optical adjustment
- - Approach Detection Alerts (visual + audio)
- - Emergency Auto-Notification
- - User Profiles (Pilot / Operator)
- - Embedded Windshield HUD (future)
- - Offline mode — works without internet

Why Now? (Market Timing)

- - Rise in road accidents
- - EV + autonomous vehicles growing
- - HUD adoption increasing
- - Aviation safety tech demand rising
- - Spaceflight crew safety expanding

Market trends indicate increasing demand for enhanced safety and situational awareness systems.

Competitive Landscape

No existing solution integrates all of the following:

- HUD +
- Prescription auto-correction +
- Adaptive optical tuning +
- Orientation awareness +
- Approach detection +
- Emergency auto-notification

VyO Vision is the only system that unifies all 6.

Technology Overview

VyO Vision integrates:

- Adaptive optical module
- Real-time orientation sensing
- Embedded processing unit
- HUD projection system
- Context-aware safety logic

Technology Overview cont…

- VyO Vision — Optical Capability (Current & Roadmap)
- Current System (MVP)
- Electrically tunable adaptive optics module
- Dynamic vision adjustment across a wide range of user needs
- Real-time adjustment via user input & sensor data
- Enhances clarity, focus distance, and low-visibility perception
- Astigmatism Support

Technology Overview cont…

- Compatible with standard prescription glasses or contacts
- VyO Vision augments spherical focus & situational awareness
- No interference with existing CYL / AXIS correction
- Roadmap (Advanced Optics)
- Multi-axis adaptive optics
- Cylindrical (CYL) compensation layers
- Personalized optical profiles per user
- Aviation & aerospace-grade enhancements

How It Works

- Tracks orientation and motion in real time
- Dynamically adjusts visual clarity based on user needs
- Detects hazards and environmental changes
- Provides contextual alerts and safety responses
- Can trigger emergency notification when needed

Future Product: Embedded Windshield HUD

VyO Vision can be:

- - Built directly into the windshield glass
- - Activated at the push of a button
- - No film needed
- - Invisible when off
- - Full cockpit integration

This is the long-term vision.

Business Model

- - Automotive partnerships
- - Aviation partnerships
- - OEM licensing
- - Direct-to-consumer HUD kits
- - Enterprise fleet safety subscription
- - Premium emergency alert subscription

Traction

- - 14 years of research
- - Working prototype
- - Early conversations with advisors and industry professionals
- - Patent counsel retained
- - Provisional + non-provisional path defined
- - Growing investor interest

IP Strategy (Adam’s Section)

- • Provisional Patent Filed — April 2026
  - Adaptive optics + safety system claims
  - HUD + emergency detection integration
  - Non-provisional planned (2027)

Strong protection across optical, hardware, and software methods.

Market Size

- Automotive Safety Tech: $203B
- Aviation Cockpit Systems: $84B
- Spaceflight Crew Systems: Growing 17%/yr

- Total Addressable Market (TAM): $287B+

Go-To-Market

- Phase 1: Aviation simulator validation
  Phase 2: Aviation integration
  Phase 3: Automotive expansion
  Phase 4: Spaceflight

Financial Projections (Simple)

- Year 1: Prototype → Pilot
- Year 2: Pilot → Partnerships
- Year 3: Scale manufacturing
- Year 4: Major OEM deals

Funding Ask

- Exploring a ~$2M seed round
- To fund:

- - Patent completion
- - Hardware refinement
- - Pilot program (10–20 vehicles)
- - Manufacturing setup
- - Embedded windshield R&D

Why VyO Vision?

- - First technology of its kind
- - High-impact, life-saving mission
- - Strong patent foundation
- - Founder with 14 years dedication
- - Early traction
- - Multi-billion-dollar market

AERS Roadmap — Future Safety Capabilities Cont…

Phase 1 — Core Emergency Functions

✓ Crash detection

✓ Location-based emergency alerts

✓ Automatic notification to selected family/friends

✓ Real-time hazard detection

Phase 2 — Advanced Safety Communication

✓ Safe-arrival notifications (“I arrived safely” auto-message)

✓ Public alert integration (AMBER Alerts, missing person notices)

✓ Emergency contact routing (SMS/email push notifications)

✓ Expanded offline safety logic

AERS Roadmap — Future Safety Capabilities

Phase 3 — Incident Support & Documentation

✓ Auto-triggered video recording during an accident

✓ Location + timestamp logging

✓ Evidence packet creation for insurance or investigators

✓ Optional connection to legal support networks

Phase 4 — Full AERS Ecosystem

✓ Integrations with emergency partners

✓ Secure cloud escalation options

✓ Vehicle-to-Responder communication

✓ Multi-device safety synchronization (car, motorcycle, aircraft)

The Founder

- Catherine Jones
- Founder & CEO
- Visionary, inventor, builder, researcher since 2010
- Leading the future of human safety + optical innovation.

Closing

- VyO Vision
- Saving Lives Through Vision
- **Thank you.**

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