

YVision Platform and Demo Cases

May 18th, 2026

YVISION

THE REALITY COMPILER

THE NEXT DOMINANT PLATFORM



NATURE
Forests. Oceans.
Climate. Biodiversity.



SPORTS
Performance. Tactics.
Strategy.



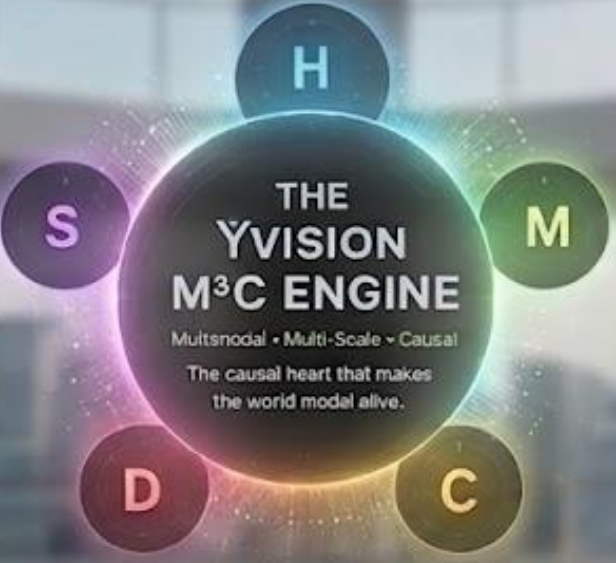
CITIES
Infrastructure. Mobility.
Energy. People.



EDUCATION
Learning. Curiosities.
Customized.



HEALTH
Patients. Organs.
Procedures.



S- Multi-scale
H- Hypergraph-based
M- Multimodal
C- Causal
D-Dynamic

Health- Surgery (Acts 1-4)

YVision **HELIX: The Living World Model for Surgery** **YVision Pro visualizations**
A Patient-Specific Causal Replica

ACT 1 & 2: PRE-SURGICAL PLANNING | 22:47 | The Night Before

3D anatomical model built from compiled CT and MRI scan data [cite: 21]

Right Hepatic Artery (variant detected)

3D Model
• Visualization
• Tumor
• Margin [cite: 21]

Tumor Margin

IDEAS ENGINE:
Branching Futures
Risk: 78% Confidence
Community Memory: 847 Comparable Cases [cite: 21, 29, 30]

Dr. Ana Carvalho

ACT 3 & 4: INTRAOPERATIVE EXECUTION | 08:14 | Next Morning

Real-time recalibration data
• Tissue divergence: 2.1mm
• Recalibrating Overlay [cite: 44]

ALERT: Unusual Anatomy
Model Confidence: 71%
Confirm Approach [cite: 46]

AR PATIENT-SPECIFIC PLAN

ALERT: Unusual Anatomy
Model Confidence: 71%
Confirm Approach [cite: 46]

Dr. Carvalho's Annotation:
Drainage pattern override [cite: 35]

YScope video (deployed 2012) Ydreams [cite: 52]

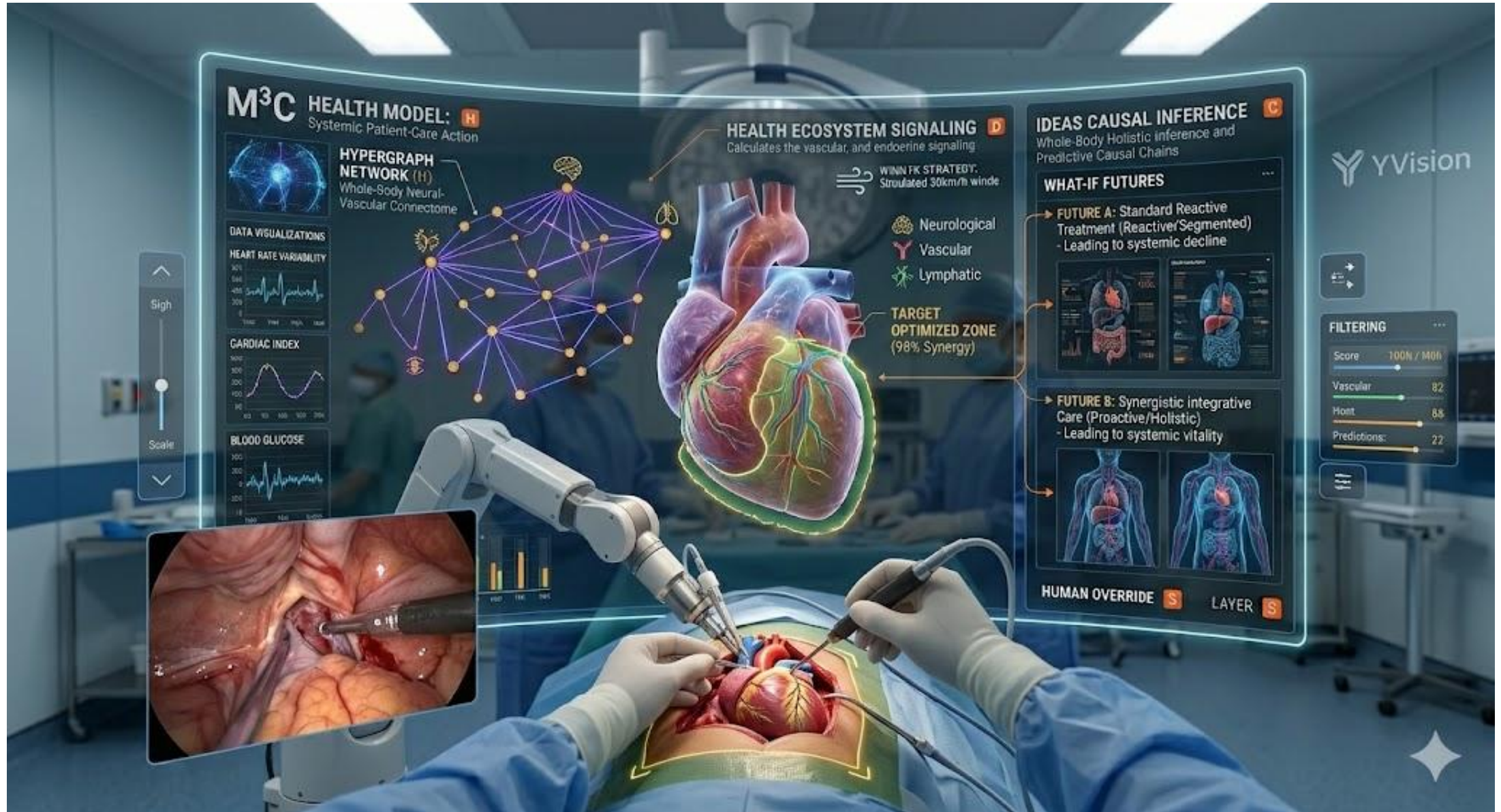
YScope video (deployed 2012) [cite: 52]

YVISION REALITY COMPILER PLATFORM [cite: 52, 55]

AGRICULTURE CITIES
SPORT EDUCATION

'The human is always the only author that matters' [cite: 55]

Health- Surgery (Act 4- in detail)



Nature- Agriculture



Nature- Forestry



Nature- Location Based Games

(Native American Tribes-Ho Chunk Nation)



Cities- Mobility



Sports-Football



Coming Next- Education

IMAGINATION STATION: [cite: 134]
Photosynthesis

EXPLORE
Tomás doesn't study abstract concept world at their own pace and scale [cite: 156, 157]
Steps into the Imagination Station headset and shrinks to molecular scale [cite: 137]

EXPERIENCE
The Surprise Calculus introduces a perturbation: what if a ATP production cascades [cite: 140]
Steps into the Imagination Station [cite: 142]

INVENTS
Proposals are evaluated by consequence: the ecosystem either recovers or degrades further
Failure is informative, not punitive [cite: 159]

WONDERS
He leaves the session with a question he invented himself—the most disruptive thing education can produce [cite: 162]
"What if CO2 doubles?" [cite: 162]

BREAKS & DIAGNOSES
The Surprise Calculus introduces a perturbation: what if a key enzyme is deleted? [cite: 140]
The system generates the cascading failure, and Tomás has to diagnose it [cite: 147, 140]

- Molecular to planetary scale [cite: 164]
- Adversarial perturbations [cite: 164]
- Living Learning Record [cite: 164]
- Nature-derived complexity [cite: 164]

HUMAN ALWAYS IN THE LOOP [cite: 155, 168]

YVision- The Mother of All Demos



THE MOTHER OF ALL DEMOS: REALITY COMPILED

YVision Pro
visualizations

Step Inside Reality Before It Happens. [cite: master tagline]

GLOBAL & URBAN (LISBON CASE)

22:47 | Pre-Intervention [cite: master tagline]



Physical Reality:
(25 de Abril Bridge
[cite: 25th bridge])

Thermal Field
at torages litec
25th Bridge
[cite: 25th bridge])

Buildings are nodes,
thermal field data,
roads agents weather
[cite: master tagline]

Traffic glows, nodes
with thermal field
roads agents weather
[cite: master tagline]

Cars are dynamic agents
[cite: 25th hypergraph]
[cite: master tagline]

REALITY-TO-WORLDS CASCADED HYPERGRAPH

SCALE MORPHISM

[cite: master tagline, Lisbon World Model]

MACRO
Urban Grid
[cite: master tagline]

MESO
Operational
District
[cite: master tagline]

MICRO
Anatomical
& Mech-Anat:
[cite: HE&M Integration,
S. Irena variant]

Tumor Merdel

SCALE MORPHISM



ONE ENGINE | FIVE WORLDS

INTERVENTION & CAUSAL BRANCHING

08:14 | Next Morning [cite: master tagline, 25th bridge]

TRIGGER: Emergency
25 de Abril Bridge Closure
[cite: 25th bridge]

User-triggered
causal intervention
[cite: 25th bridge]

User-triggered
causal intervention
25 de Abril Bridge Closure
[cite: 25th bridge]



BRANCH A: BEST CASE
• Traffic neous on traffic
• Logistics traffic data
• Emissions potient emissions
[cite: master tagline]



BRANCH B: WORST CASE
• Traffic neous on traffic
• Logistics traffic data
• Emissions potient emissions
[cite: master tagline]



BRANCH C: SURPRISING CASE
• Effects on telemetry traffic
• Emissions is wowed
[cite: master tagline]

ALERT: Unusual Anatomy / Conflict Detected
[cite: master tagline]



The machine simulates;
the human decides
[cite: master tagline]



Remove any of the three
and the loop breaks
[cite: master tagline]

Input:
Sensors,
Drones, IoT,
AR Annotations
[cite: master tagline]

What the System Does:
UNDERSTANDS
(Spatial-Semantic
Comprehension)
[cite: master tagline]

THE FUTURE OF AI IS NOT CHATBOTS.
IT IS WORLD MODELS. [cite: master tagline]