



## HYPERGIANT RESEARCH

HYPERGIANT R&D LABS OFFICE OF MACHINE INTELLIGENCE

\*\*\*

# INTELLIGENCE CROSSED WITH INTELLIGENCE.

We're already smart. Using our own technology, we're even smarter. Utilizing both, we are redefining the world of tomorrow. Today.

### RESEARCH LABS



## A PHILOSOPHY OF INNOVATION

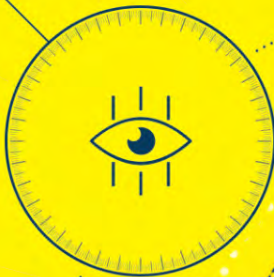
SHAPING THE FUTURE WITH IDEAS AND PLATFORMS

HYPERGIANT - OFFICE OF  
MACHINE INTELLIGENCE



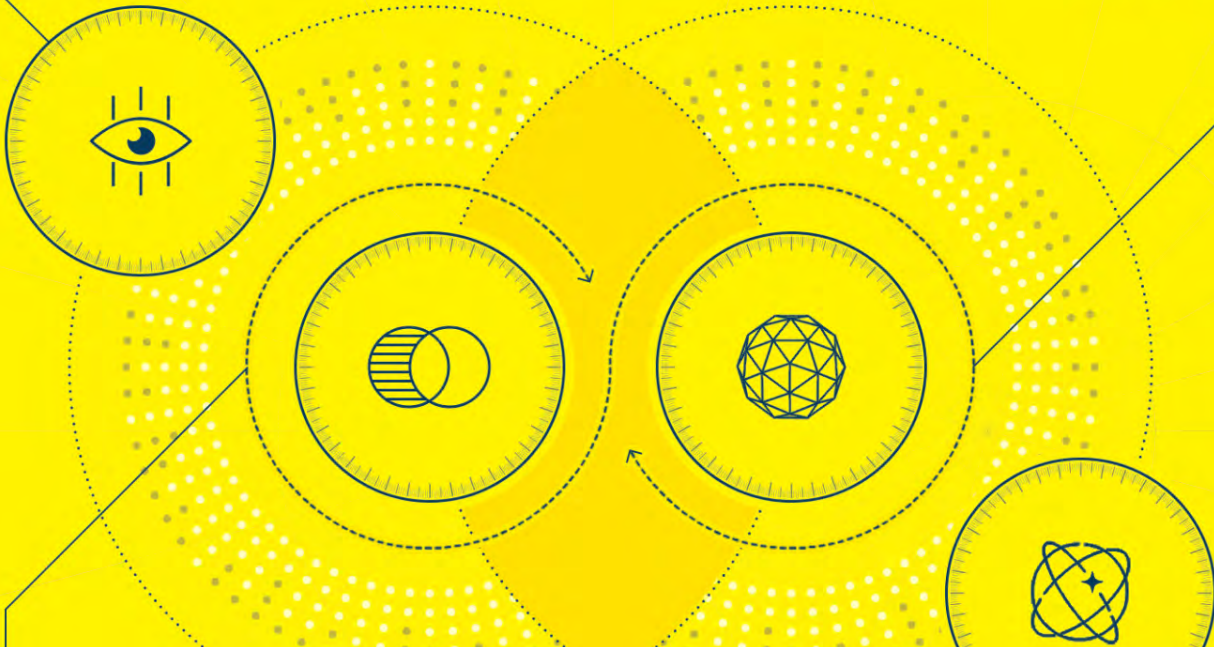
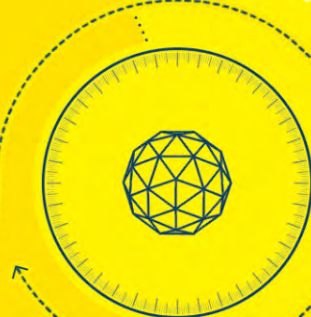
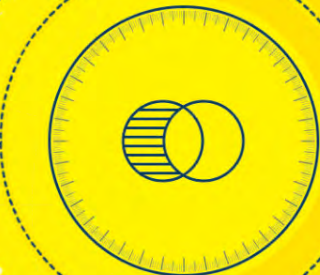
### 1 INVESTIGATION

PERSISTENTLY TEST AND STUDY LATEST INNOVATIONS FROM ANY LOCATION IN THE MARKETPLACE UNIVERSE. FROM CENTRAL TO FRINGE.



### 3 ACQUISITION

PARTNER, FUND AND/OR ACQUIRE SAID TECHNOLOGIES. RELOCATE OPERATIONS TO HYPERGIANT INDUSTRIES HEADQUARTERS. PREPARE PRODUCT FOR DEVELOPMENT AND DEPLOYMENT.



2

**EVALUATION**

LEVERAGE HYPERGIANT MARKET POSITIONING FOR DEEP VETTING AND OPPORTUNITY ANALYSIS.

**DEVELOPMENT**

4

EMPLOY HYPERGIANT CREW TO ENGINEER AND ENHANCE INCUBATEE. READY TECHNOLOGY FOR FINAL STAGE OF DEPLOYMENT.



**DEPLOYMENT**

VIA HYPERGIANT NETWORK AND PARTNERSHIPS, LAUNCH INNOVATION ON CALCULATED TRAJECTORY OF ACCELERATED GROWTH.

**DE-CLASSIFIED**



# RESEARCHING TOMORROW, TODAY.

HYPERGIANT - OFFICE OF MACHINE INTELLIGENCE

## BETTER LIVING THROUGH HYPERGIANT INDUSTRIES

Hypergiant Industries' R&D group is the vanguard of exploration and innovation, a passionate, diverse group of pragmatic futurists who develop solutions at the fringes of emerging technology in order to evolve human/machine collaboration, illuminate the unknown, and elevate our collective potential.

The Fourth Industrial Revolution is upon us and the creative technologists are already challenging orthodoxies and are free to pursue projects on horizons in the near future and long-term foundational efforts critical to massive change. It could be a discrete business problem that has plagued an entire industry or it could be considerably more moonshot, untethered by the technological constraints that restrict true, meaningful change.

Hypergiant Industries' R&D engages in areas of true consequence and the team is spread across projects ranging from the esoteric to the fantastical. But always with an approach that is ethical, responsible, intelligent and empathetic. Hypergiant R&D is at the forefront of scientific advancement within Hypergiant Industries and, whether they are building a pilot or Proof of Concept or scaling and hardening a new project for expansive rollout, they are driven to succeed for their stakeholders: business clients, partners, sibling companies, and society at large.



"MACHINE LEARNING ALLOWS US TO BUILD SOFTWARE SOLUTIONS THAT EXCEED HUMAN UNDERSTANDING AND SHOWS US HOW AI CAN INNERVATE EVERY INDUSTRY."

- STEVE JURVETSON / BOARD MEMBER OF SPACEX AND TESLA

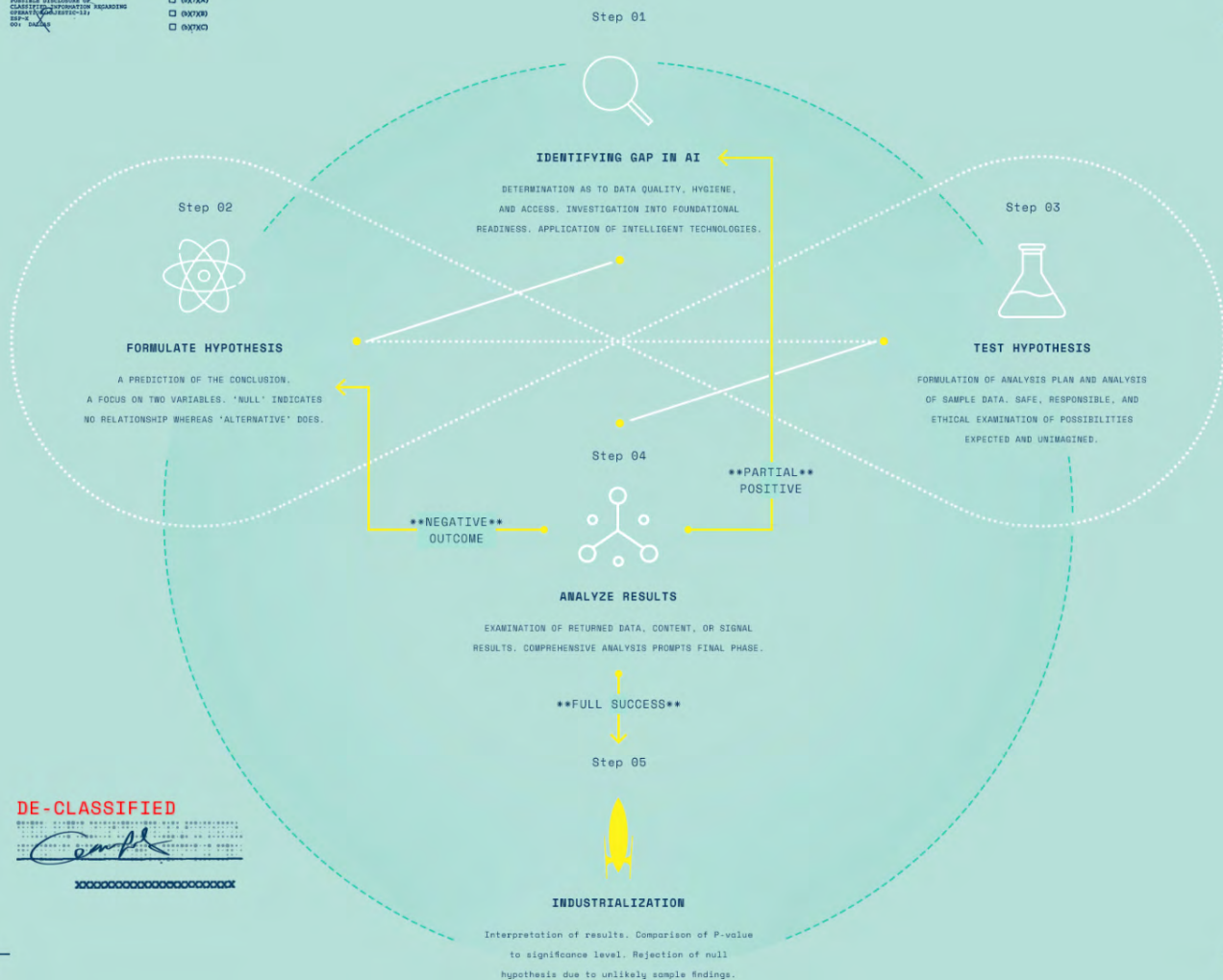
## RESEARCH SCHEMATIC #701

The following diagram illustrates the secondary methodology employed by Hypergiant in the identification, formulation, testing and deployment of Machine and Artificial Intelligence Technologies.















PROPERTY OF HYPERGIANT INDUSTRIES, INC. - RESEARCH SCHEMATIC ARCHIVES

**POSSIBLE REVISIONS OF CLASSIFICATION REGARDING THIS SCHEMATIC**

- (U) (X) (A)
- (U) (X) (R)
- (U) (X) (S)



## RESEARCH FIELDS OF STUDY

	RESEARCH DEPARTMENT	<b>NEUROMORPHIC COMPUTING</b>	<ul style="list-style-type: none"> <li>ELECTRONIC ANALOG CIRCUITS THAT MIMIC NEURO-BIOLOGICAL ARCHITECTURES PRESENT IN THE NERVOUS SYSTEM</li> <li>COMPUTATIONAL BUILDING BLOCKS ARE LOGICALLY ANALOGOUS TO NEURONS</li> <li>VERY-LARGE-SCALE INTEGRATION (VLSI) SYSTEMS</li> </ul>
	RESEARCH DEPARTMENT	<b>COGNITIVE CYBER SECURITY</b>	<ul style="list-style-type: none"> <li>PATTERNED ON HUMAN THOUGHT PROCESSES TO DETECT THREATS AND PROTECT PHYSICAL AND DIGITAL SYSTEMS</li> <li>PREVENT CYBER ATTACKS THAT MANIPULATE HUMAN PERCEPTION</li> </ul>
	RESEARCH DEPARTMENT	<b>ROBOTIC PERSONAL ASSISTANTS</b>	<ul style="list-style-type: none"> <li>ROBOTIC PROGRAMMING FOR ASSISTIVE NEEDS</li> <li>OFFICE-ORIENTED TASK AUTOMATION AND USER INTERACTION RESEARCH</li> </ul>
	RESEARCH DEPARTMENT	<b>AUTONOMOUS SURGICAL ROBOTICS</b>	<ul style="list-style-type: none"> <li>ASSIST SURGEONS IN COMPLEX OPERATIONS BY NAVIGATING INSIDE THE BODY</li> <li>SMART TISSUE AUTONOMOUS ROBOT (STAR) INTEGRATES 3D COMPUTER IMAGING AND SENSORS</li> </ul>
	RESEARCH DEPARTMENT	<b>NEXT GEN CLOUD ROBOTICS</b>	<ul style="list-style-type: none"> <li>ACCESS VAST AMOUNTS OF PROCESSING POWER AND DATA FROM THE CLOUD</li> <li>CHEAP COMPUTING POWER AND UBIQUITOUS NET CONNECTIVITY</li> <li>EXPANDING A ROBOT'S KNOWLEDGE BEYOND ITS PHYSICAL BODY</li> </ul>
	RESEARCH DEPARTMENT	<b>THOUGHT CONTROLLED GAMING</b>	<ul style="list-style-type: none"> <li>TRANSLATE CONTROL SYSTEMS FROM BRAIN INTO HUMAN INTENT</li> <li>PROVIDE TELEKINETIC CONTROL OF THE DIGITAL WORLD</li> </ul>
	RESEARCH DEPARTMENT	<b>REAL-TIME UNIVERSAL TRANSLATION</b>	<ul style="list-style-type: none"> <li>ANALYZES THE PATTERNS OF AN UNKNOWN FOREIGN LANGUAGE TO ENABLE INSTANTANEOUS CONVERSION</li> </ul>
	RESEARCH DEPARTMENT	<b>VIRTUAL COMPANIONS</b>	<ul style="list-style-type: none"> <li>PERSISTENT MULTI-MODAL INTERFACES FOR SOCIAL INTERACTION TO PROVIDE COMPANIONSHIP</li> </ul>
	RESEARCH DEPARTMENT	<b>REAL TIME EMOTION ANALYTICS</b>	<ul style="list-style-type: none"> <li>FACIAL EXTRACTION FOR TELECOMMUNICATIONS AND BEHAVIORAL SCIENCE.</li> </ul>
	RESEARCH DEPARTMENT		
	RESEARCH DEPARTMENT	<b>NATURAL LANGUAGE PROCESSING</b>	<ul style="list-style-type: none"> <li>CONVERSATION STATE MACHINES</li> <li>CONCEPT AND CONTEXT EXTRACTION/ CORRELATION TO DISCOVER THE UNSTATED PARTS OF A STORY</li> <li>HIDDEN MARKOV MODEL (HMM), LSTM (LONG SHORT-TERM MEMORY)</li> </ul>
	RESEARCH DEPARTMENT	<b>PATTERN RECOGNITION</b>	<ul style="list-style-type: none"> <li>CLASSIFICATION OF DATA BASED ON STATISTICAL KNOWLEDGE EXTRACTED FROM PATTERNS AND/OR THEIR REPRESENTATIONS</li> </ul>

	RI DE		<ul style="list-style-type: none"> <li>• KNOWLEDGE DISCOVERY IN DATABASES (KDD)</li> </ul>
	RESEARCH DEPARTMENT	<b>NEURAL NETWORKS</b>	<ul style="list-style-type: none"> <li>• SET OF ALGORITHMS MODELED LOOSELY AFTER THE HUMAN BRAIN TO HELP CLUSTER AND CLASSIFY DATA</li> <li>• AUTO-ENCODER MAPS THROUGH SMALL DIMENSIONAL LAYER</li> <li>• CONVOLUTIONAL LAYER EXTRACTS HIGH LEVELS OF FEATURES FROM THE INPUT DATA (CNN)</li> <li>• RECURRENT NEURAL NETWORK FOR SEQUENTIAL DATA (RNN)</li> </ul>
	RESEARCH DEPARTMENT	<b>DEEP LEARNING</b>	<ul style="list-style-type: none"> <li>• SUBSET OF MACHINE LEARNING USING ARTIFICIAL NEURAL NETWORKS</li> <li>• THE UNIVERSAL APPROXIMATOR ENABLES LEARNING</li> <li>• STACKED NEURAL NETWORKS WITH VARIOUS DEEP LAYERS</li> </ul>
	RESEARCH DEPARTMENT	<b>MACHINE LEARNING</b>	<ul style="list-style-type: none"> <li>• DEVELOP TECHNIQUES TO GIVE COMPUTERS THE ABILITY TO LEARN FROM SMALLER DATA SETS, WITHOUT THE DIRECT MANIPULATION OF A MODEL</li> <li>• UNSUPERVISED / SUPERVISED TRAINING</li> <li>• REINFORCEMENT LEARNING</li> </ul>
	RESEARCH DEPARTMENT	<b>AUTONOMOUS SYSTEMS</b>	<ul style="list-style-type: none"> <li>• NETWORK MANAGED AND SUPERVISED BY A SINGLE ENTITY</li> <li>• AUTONOMOUS SYSTEM NUMBER (ASN)</li> </ul>
	RESEARCH DEPARTMENT	<b>RF RESONANT CAVITY THRUSTERS</b>	<ul style="list-style-type: none"> <li>• RADIO FREQUENCY (RF)</li> <li>• PRODUCE THRUST BY REFLECTING MICROWAVES INTERNALLY IN THE DEVICE</li> <li>• EMDRIVE, HYPOTHESIZED PROPELLANT-FREE THRUSTER</li> </ul>
	RESEARCH DEPARTMENT		
	RESEARCH DEPARTMENT	<b>COMPUTER VISION</b>	<ul style="list-style-type: none"> <li>• MODELS THAT CLASSIFY OBJECTS, APPLY PIXELWISE SEGMENTATION, IDENTIFY ACTIONS, AND EXTRACT CONTEXT</li> <li>• CAPS(CAPSULE)NET, MASK R(REGION)-CNN, YOLO (YOU ONLY LOOK ONCE)</li> </ul>
	RESEARCH DEPARTMENT	<b>DECENTRALIZED AUTONOMOUS ORGANIZATIONS</b>	<ul style="list-style-type: none"> <li>• SMART CONTRACTS</li> <li>• APPLICATIONS THAT ARE DISTRIBUTED</li> <li>• THE FUTURE OF THE WEB IS CENTRALIZED BUT DISTRIBUTED</li> </ul>
	RESEARCH DEPARTMENT	<b>HARMONIC ISOLATION GUIDANCE</b>	<ul style="list-style-type: none"> <li>• UNDERSTAND ANOMALOUS FUNCTION WITHIN HARMONICS DATA, SPECIFICALLY WITHIN INDUSTRIAL-TYPE INDUSTRIES</li> <li>• ASSIST IN THE CANCELLATION OF HARMONIC EXPRESSIONS</li> </ul>
	RESEARCH DEPARTMENT		
	RESEARCH DEPARTMENT	<b>SPEECH SYNTHESIS</b>	<ul style="list-style-type: none"> <li>• TAKES A DATA-POINT OR KNOWLEDGE STRUCTURE AND CONVERTS IT INTO A FUNCTIONAL REPRESENTATION OF A SOUND WAVE</li> <li>• WAVENET, TACOTRON, DEEPSPEECH, DEEP VOICE</li> </ul>
	RESEARCH DEPARTMENT	<b>SPEECH RECOGNITION</b>	<ul style="list-style-type: none"> <li>• TAKES A DISCRETE COLLECTION OF VALUES THAT MODEL A SOUND WAVE AS INPUT AND GENERATES A STRING REPRESENTATION OF WHAT WAS SAID</li> <li>• A MIX OF MARKOV MODELS AND DEEP LEARNING TO EXTRACT</li> </ul>
	RESEARCH DEPARTMENT	<b>NANOFABRICATION ENGINEERING</b>	<ul style="list-style-type: none"> <li>• NANOMETER DIMENSIONS TO PROCESS MATERIAL ON A LARGE SCALE</li> <li>• TOP-DOWN AND BOTTOM-UP METHOD</li> <li>• HIGH-DENSITY MICROPROCESSORS AND MEMORY CHIPS</li> </ul>
	AT		<ul style="list-style-type: none"> <li>• I FEVERAGES THE PRORARTI TSTTC AND NON-ROOI FAN BEHAVIOR OF SURATOMIC PARTTICES</li> </ul>

	RESEARCH DEPARTMENT	<b>APPLICATIONS OF QUANTUM COMPUTING</b>	<ul style="list-style-type: none"> <li>RESEARCH INTO THE IMPACT OF QUANTUM COMPUTING FROM A PRAGMATIC APPROACH AND HOW IT AFFECTS MACHINE INTELLIGENCE, ENCRYPTION AND EVERYDAY COMPUTING</li> </ul>
	RESEARCH DEPARTMENT		
	RESEARCH DEPARTMENT		
	RESEARCH DEPARTMENT	<b>AUTONOMOUS NAVIGATION SYSTEMS</b>	<ul style="list-style-type: none"> <li>SIMULTANEOUS LOCALIZATION AND MAPPING (SLAM) TRACKING OPTIMIZATION</li> <li>3-D MAP CREATION AND ANNOTATION USING LIDAR AND RADAR</li> <li>ROUTING FOR "IN THE WILD" PLANNING</li> </ul>
	RESEARCH DEPARTMENT	<b>CRYPTOGRAPHIC COMMUNICATION PROTOCOL</b>	<ul style="list-style-type: none"> <li>RESEARCH MODERN TECHNIQUES FOR SECURING DATA TO BE SHARED</li> <li>HOMOMORPHIC ENCRYPTION; BLOCKCHAIN; HYPERGRAPH</li> </ul>
	RESEARCH DEPARTMENT	<b>LOWER EARTH ORBIT SPACE JUNK COLLECTION SYSTEM</b>	<ul style="list-style-type: none"> <li>USES A HARPOON, NET, DRAG SAIL AND LIDAR TO SPEED UP THE DE-ORBITING PROCESS</li> <li>REMOVE DEBRIS EXPERIMENT</li> </ul>



# HYPERNSR

PATENT - PENDING PROJECT

HYPERGIANT R&D



ACCESS GRANTED\*\*

## BIOMETRIC HELMET DISPLAY

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A next-generation space helmet prototype which can display details like an astronaut's vital signs or other information about a mission. Its purpose is to improve safety by putting more information at astronauts' fingertips and cutting down on how much they have to maneuver in the spacesuit.



## PATCH ON PALM ACTIVATES THE DISPLAY

The Astronaut's glove has tags sewn onto it that coordinate with the HUD to display on demand vitals for the astronaut during an EVA maneuver.

## VIDEO DEMONSTRATION

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## PRESS LINKS

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MACHINE INTELLIGENCE

BY DAN ROBITZSKI

TOPIC

#AI #TECHNOLOGY

NEXT-GEN SPACESUIT HELMET HAS AN "IRON MAN"  
HEADS UP DISPLAY

READ TRANSCRIPT



# HOLOBOOK

HOLOGRAPHIC MARKETING PROJECT

HYPERGIANT R&D

ACCESS GRANTED\*\*

## HOLOGRAPHIC PITCH DECK

\*\*\*

PowerPoint and Keynote decks are the medium in which the design leaders of the past shared their narratives. But just as cave paintings gave way to Michelangelo and the radio shows of yesteryear paved the way for dazzling, eye-searing BK video, so too must presentation decks evolve. Enter: the Holobook.

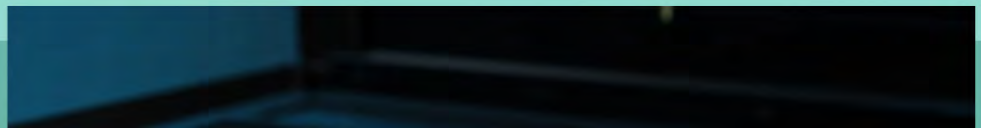


## HOLOGRAPHIC VIDEO PROJECTION

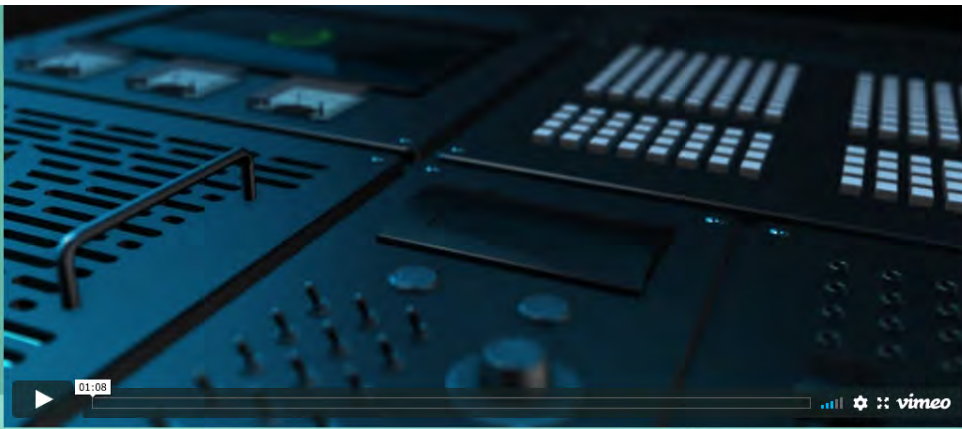
Utilizing spinning LEDs to create a 3-dimensional hologram, the Holobook introduces the viewer to the (perhaps surprisingly long) history of artificial intelligence through rich visuals and professional voiceover. Crafted for portability and style, the space-age mechanism reflects signature Hypergiant retro-science fiction style via oscilloscope instrumentation and custom analog meters. So, the next time a potential partner fires up their laptop for another boring presentation, ask yourself why they're stuck in the 20th century. Only Hypergiant is tomorrow today\*.

## VIDEO DEMONSTRATION

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## PRESS LINKS

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MACHINE INTELLIGENCE



BY MARTY SWANT

TOPIC

#AI #TECHNOLOGY

THIS AGENCY BUILT ITS OWN HOLOGRAM PITCH  
DECK TO EXPLAIN AI

READ TRANSCRIPT



CONFIDENTIAL INQUIRY FORM XXXXXX

# R&D SUBMIT

NAME

COMPANY

ELECTRONIC MAIL ADDRESS

BRIEF SUMMARY OF RESEARCH

INPUT DATA FOR IMMEDIATE  
CORRESPONDENCE.

SUBMIT QUERY



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