PRODUCTS & SOLUTIONS

The future stays smart.

YMOND Deep Tech Group: extended reality, artificial intelligence, computer vision, simulation and robotics solutions for industry, powered by seven specialist divisions.

28
products & solutions

7
specialist units

AI · XR · COMPUTER VISION · SIMULATION · ROBOTICS

YMOND Group Deep Technologies for the Future of Organizations.

Explore your needs with Vision Plus

FIND YOUR SOLUTION

Built around real challenges.

A collection of specialized products and solutions to respond to the real needs of organizations, industries and businesses.

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SPECIALIST TEAMS. SHARED PURPOSE.

Seven specialist units. One deep tech group.

YMOND Group Deep Technologies for the Future of Organizations.

YSafe

Industrial Training Simulation Department

Design and production of industrial and safety training simulators based on virtual reality to transform high-risk environments into controlled, interactive and measurable training.

Explore department ↗

Hooshly

Enterprise AI Department

Provider of secure artificial intelligence solutions and intelligent organizational and industrial automations to transform data and knowledge into analytical and decision-making tools.

Explore department ↗

YLook

Augmented Reality Product Experience Platform Design Department

Designer and developer of creative and interactive solutions for the introduction and digital experience of products in all stages before purchase, presentation and after sale.

Explore department ↗

Metanoya

Cross-Platform and Metaverse Game Studio

Production and development studio of multi-platform and metaverse games for computer, mobile, virtual reality, augmented reality and interactive experiences.

Explore department ↗

Dymora

Robotics and Mechanical Hardware Department

Designing and producing control systems, robotics and interactive hardware to create real, physical and intelligent communication between humans, machines and the environment.

Explore department ↗

Arassis

Knowledge-based company for designing neurosurgery navigation systems

Designing surgical guidance systems and medical data visualization to increase accuracy, patient safety and support physician decision-making.

Explore department ↗

Sharif XR Lab

Sharif University immersive Reality Research Laboratory

Sharif University of Technology Innovation Center and Research and Development Laboratory of extended reality Technologies; A bridge between academic research, industry and commercialization.

Explore department ↗

YSafe · Industrial Training Simulation

FireBox

Virtual reality simulator of industrial fire fighting



Virtual reality firefighting and emergency response training simulator with jetfire, gas leak and firefighting equipment scenarios.

FireBox is a virtual reality system for training fire extinguishing and managing emergency situations in industrial environments. The product recreates the operational site, firefighting equipment and incident scenarios so that staff can practice the appropriate response in a practical and repeatable manner without endangering people or equipment.

In the VR environment, the user selects and prepares the equipment, works with the fire truck, connects the hose, uses the nozzle, extinguishes the jet fire, and stops the gas leak step by step. The system has a mode of training, free practice and evaluation and records the operation time, errors and the result of the scenario in the form of a performance report.

KEY CAPABILITIES

- Simulation of jetfires, gas leaks and industrial accidents
- Training, free practice and evaluation modes
- Interaction with machine, panel, hose, nozzle and safety equipment
- Time, error, and user performance reporting

INDUSTRY
Oil, gas, petrochemicals, and energy

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/firebox ↗

YSafe · Industrial Training Simulation

OILPIG

Training simulator for pigging oil and gas lines



The system of training, practice and evaluation of pig sending and receiving operations in oil and gas lines, along with roles, environmental conditions and various operational risks.

OILPIG is a virtual reality system for training, practicing and evaluating oil and gas pipeline pigging operations. The operational environment, equipment and procedures of sending and receiving the pig are recreated realistically so that the technical staff can practice a sensitive and risky process without real consequences.

The system supports both step-by-step training and performance testing and simulates roles such as operator, mechanic, operator, and site operator in various environmental conditions and error scenarios. Finally, a performance report is generated to measure accuracy, order of operations, and user errors.

KEY CAPABILITIES

- Complete simulation of pig launching and receiving
- Simulation of environmental conditions, risk and error
- Defining different operational roles
- Step-by-step training and evaluable test

INDUSTRY
Oil, gas, petrochemicals, and energy

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/oilpig ↗

YSafe · Industrial Training Simulation

PowerSafe

Simulator for power cable termination training in virtual reality



Comprehensive system of training and technical assessment of power cable termination in VR environment, with step-by-step implementation of the process, fault diagnosis and performance reporting.

PowerSafe is a virtual reality solution for training and evaluating the power cable termination process in the electrical industry. This system is designed to increase the practical skills of technical staff, reduce human error, and safely practice sensitive processes, and reconstructs the workspace, tool table, cables, and required equipment in an interactive environment.

With a headset and controller, the user performs the steps of measuring and cutting the cable, closing the bands, preparing the layers, installing thermal insulation and fixing the parts according to real conditions. In two modes of training and evaluation, the system detects errors, provides voice feedback, and reports performance time and quality.

KEY CAPABILITIES

- Step-by-step simulation of cable termination
- Error detection and audio feedback
- Interactive work environment with realistic tools and equipment
- Training and evaluation mode with performance reporting

INDUSTRY
Oil, gas, petrochemicals, and energy

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/powersafe ↗

YSafe · Industrial Training Simulation

ZeroRisk

Crisis and risk management training simulator in VR



Training simulator for dealing with earthquakes, war, storms and floods in the stages before, during and after the crisis and in internal and external environments.

ZeroRisk is a public education system based on virtual reality to increase preparedness against natural and human disasters. Users face earthquakes, wars, storms and floods in a controlled environment and practice correct behavior before, during, and after an incident.

Scenarios are played indoors and outdoors and cover decision-making, sheltering, safe egress, helping others, and following safety precautions. Stand-alone versions of the headset and photorealistic scenarios turn the theoretical training of crisis management into a practical, impactful and repeatable experience.

KEY CAPABILITIES

- Earthquake, war, storm and flood scenarios
- Internal and external environments
- Teaching correct behavior before, during and after the crisis
- Suitable for citizens, students and employees of organizations

INDUSTRY
Education and skill training

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/zerorisk ↗

YSafe · Industrial Training Simulation

SafeTour

360 virtual industrial tour for training and Site Induction



360 degree virtual tour system for industrial site introduction and group safety training, guided by instructor and interactive pointer.

Safetor digitizes the process of initial familiarization with the industrial site and safety training using 360-degree panoramic images. New troops view site sections, operational units, equipment and safe routes in an integrated and controlled environment without prematurely entering high-risk environments.

The meeting can be held as a group and guided by the trainer; All users see the same point at the same time, and the instructor specifies technical details or the desired route with a virtual laser pointer. This method makes the training content standard, repeatable and the same for all learners and reduces the cost and risk of the initial face-to-face visit.

KEY CAPABILITIES

- Panoramic coverage of the key points of the industrial site
- Virtual pointer to explain equipment and routes
- Simultaneous group training with instructor guidance
- Standardize training and reduce high-risk visits

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/safetour ↗

Hooshly · Enterprise AI Solutions

Hooshly Enterprise AI Platform

Enterprise artificial intelligence platform and internal knowledge assistant



Integrated knowledge management platform, dedicated assistants, intelligent workflows and data and document analysis; With the possibility of secure deployment on the organization's infrastructure.

Hooshly's enterprise artificial intelligence platform transforms knowledge, documents, data and operational processes into intelligent, searchable and decision-supporting tools. Using large language models, RAG and knowledge graph, the platform integrates the dispersed resources of the organization into a secure knowledge base and provides answers based on the same internal resources.

The organization can create dedicated assistants for HR, HSE, training, technical, support and management; Automate conditional workflows, approvals, and alerts; and extract reports, dashboards and step-by-step guides from operational documents and data. The solution is adjusted based on the level of access and infrastructure of the organization, and it has the possibility of internal, dedicated or cloud deployment.

KEY CAPABILITIES

- Knowledge management and intelligent search in internal sources
- Design and automation of intelligent workflows
- Secure on-premise, dedicated or cloud deployment
- Dedicated assistants for different units of the organization
- Data analysis, document processing and management report generation

INDUSTRY
Telecommunications and Information Technology

TECHNOLOGY
Artificial intelligence (AI)

View solution details

y-mond.com/en/products/hooshly-enterprise-ai-platform ↗

Hooshly · Enterprise AI Solutions

Hooshly CVision

Machine vision system for safety and HSE monitoring



Machine vision system for real-time monitoring of safety and HSE, detection of unsafe behaviors and unusual events and sending preventive warnings.

CVision is an artificial intelligence-based machine vision system that analyzes the flow of images and videos from operational cameras in real time. This system transforms the existing video surveillance infrastructure into an active safety monitoring layer that can detect critical incidents, unsafe behavior, and abnormal conditions and issue warnings before the danger spreads.

The system can monitor the use of personal protective equipment, entry into restricted areas, crowding, falls, smoke, fire and safety violations. The recorded data are used to generate HSE reports, analyze incident trends, and identify high-risk points, and the system has the ability to connect to the organization's monitoring, control, and notification tools.

KEY CAPABILITIES

- Identification of personal protective equipment and unsafe behaviors
- Smart alert and real-time monitoring
- Detection of intrusion, fall, smoke and fire
- HSE statistical reports and analysis of high-risk points

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Artificial intelligence (AI)

View solution details

y-mond.com/en/products/hooshly-cvision ↗

Hooshly · Enterprise AI Solutions

Hooshly Industrial AI

Design of customized industrial artificial intelligence solution



Designing specific solutions for forecasting, optimization, anomaly detection and predictive maintenance based on the operational data of each industry.

Hooshly Industrial AI is not a ready-made package, but a process for analyzing the problem, data and operations of each organization and designing a specific model suitable for the same environment. This solution is designed for industries that need prediction, optimization, anomaly detection or decision aids based on their real data.

Hooshly's team connects operational data and existing systems to models for equipment performance analysis, predictive maintenance, asset management, and production optimization. The goal is to solve measurable problems such as reducing downtime and cost, increasing productivity and improving the quality of operational decisions in oil and gas, petrochemical, mining, steel, energy and manufacturing industries.

KEY CAPABILITIES

- Problem analysis and design of a dedicated artificial intelligence model
- Prediction, optimization and anomaly detection
- Predictive maintenance and repairs
- Connectivity to existing data and operating systems

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Artificial intelligence (AI)

View solution details

y-mond.com/en/products/hooshly-industrial-ai ↗

YLook · XR Product Experience Platforms

ProMax Catalog

Smart augmented reality catalog and manual



Exclusive smart catalog and manual that makes product introduction and after-sales services interactive with 3D model, text and voice search and augmented reality.

ProMax Catalog is a proprietary software in the form of a mobile application that turns paper brochures and manuals into a digital, 3D, augmented reality-based experience. This solution is designed for product introduction, instruction on how to use, support and after-sales services, and provides information such as component performance, warnings and maintenance tips in a visual and understandable way to the user.

The user can reach the required information by text or voice search, check the 3D model of the product, and by holding the mobile camera on the desired part, identify the same part or area and see the related description directly on the actual product. In this way, the manual becomes an intelligent and always available assistant.

KEY CAPABILITIES

- Converting the manual to a digital and interactive version
- Component identification with camera and text or voice search
- Personalization for all types of goods, equipment and services
- Displaying the 3D model of the product and AR information on the real sample
- Providing basic training, warning, maintenance and troubleshooting

INDUSTRY
Retail and digital commerce

TECHNOLOGY
Augmented Reality (AR) · Artificial intelligence (AI)

View solution details

y-mond.com/en/products/promax-catalog ↗

YLook · XR Product Experience Platforms

Y-Code

Interactive packaging and augmented reality for brands



Interactive packaging that connects physical products with digital content, games, brand campaigns, and augmented reality experiences.

Y-Code transforms a physical product or package into a live, measurable digital medium. By scanning the QR Code, the appearance of the packaging or the product itself, the customer can access information, consumption training, videos, games, contests, raffles and brand-specific augmented reality experiences only with a mobile phone.

The content of this platform can be updated without changing the physical packaging and can be connected to a customer club, registration form, survey or CRM. Along with creating a fun and educational experience, Y-Code records scanning statistics, time and location of user interaction and behavior to optimize data-driven sales and loyalty campaigns.

KEY CAPABILITIES

- Content activation with QR Code or visual recognition of the product
- Connect to customer club, survey and CRM
- Update content without reprinting packaging
- Running AR, games, challenges, contests and sales campaigns
- Analysis of interaction rate and user behavior

INDUSTRY
Retail and digital commerce

TECHNOLOGY
Augmented Reality (AR) · Game

View solution details

y-mond.com/en/products/y-code ↗

YLook · XR Product Experience Platforms

EduMotion

Designing interactive educational content with AR and XR



Designing interactive educational content with AR, VR and MR to transform books, pamphlets and technical concepts into visual, three-dimensional and lasting experiences.

EduMotion Line is the design and production of interactive educational content that transforms curricular, technical, organizational and industrial concepts into a visual and interactive experience by combining imaging, augmented reality, virtual reality, mixed reality, animation and 3D modeling. The purpose of this strategy is to increase the depth of learning and simplify topics that are difficult to explain with text and still images.

A book, pamphlet, poster, educational card or real environment can be the starting point of the content and the user enters the learning path with a mobile phone, tablet or headset. This path can include text, audio, video, 3D model, practice, test and step-by-step scenarios so that the training is not just theoretical and becomes a live, lasting and measurable experience.

KEY CAPABILITIES

- Converting books, pamphlets and posters into interactive content
- Scenario design, practice, test and learning path
- Suitable for school, organizational and industrial training
- 3D model production, animation and multimedia content
- Compatible with mobile, tablet and XR devices

INDUSTRY
Education and skill training

TECHNOLOGY
Virtual Reality (VR) · Mixed Reality (MR) · Augmented Reality (AR)

View solution details

y-mond.com/en/products/edumotion ↗

YLook · XR Product Experience Platforms

Visionarium

3D introduction of the organization and the immersive narrative of the future of the brand



Immersive narrative of the past, present and future of an organization in three-dimensional space; Can be presented on a virtual reality headset or website.

Visionarium is a three-dimensional and immersive experience for narrating the past, present and future of an organization; A narrative that, instead of a teaser or a linear presentation, brings the audience into a space where they can move and see the brand's history, projects, achievements, products and customers. This experience can be provided on a virtual reality headset or website.

The first part restores the history and honors of the organization; The second part gives a clear picture of today's activities and capabilities; And the future section displays the vision, mission and future goals in the form of a conceptual environment. The result is a compact and lasting transmission of the brand's identity and direction in a short time.

KEY CAPABILITIES

- 3D narration of history, projects and honors
- Interactive introduction of today's products, services and customers
- Illustrating the vision and future goals of the organization
- Deliverable on VR headset or web platform

INDUSTRY
Advertising, marketing and branding

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/visionarium ↗

YLook · XR Product Experience Platforms

EventVerse

Interactive exhibition, event and brand activation solution



Design interactive and measurable experiences for exhibition, event, showroom and brand campaigns with AR, VR, gamification and smart sensors.

EventVerse is a solution for designing and implementing interactive experiences for exhibitions, events, showrooms, product launches and branding campaigns. By combining augmented and virtual reality, interactive display, digital kiosk, gaming, and smart sensors, the event space transforms from a static display to a live and collaborative experience.

In addition to increasing the footfall and the time of the audience, this solution provides the possibility of introducing different products, running contests and raffles, recording visitor information and collecting sales leads. The interaction report also helps the brand to measure the effectiveness of its presence in the event and analyze it for future plans.

KEY CAPABILITIES

- Designing interactive attractions for booths and showrooms
- Digital games, contests, challenges and sweepstakes
- Implementation of AR, VR and smart display experiences
- Registering leads and reporting interactions

INDUSTRY
Advertising, marketing and branding

TECHNOLOGY
Virtual Reality (VR) · Augmented Reality (AR) · Game

View solution details

y-mond.com/en/products/eventverse ↗

YLook · XR Product Experience Platforms

MetaScan360

3D scanning, 360 imaging and virtual tour



360 degree imaging, space scanning, photogrammetry and 3D modeling for virtual tour, digital catalog and XR projects.

MetaScan360 is a specialized line of 360 degree imaging, space scanning, photogrammetry and 3D modeling for places, products and equipment. The output of this process is a digital, interactive version of the real asset that is ready for remote viewing or use in XR experiences.

The produced models and images are optimized according to the destination platform in terms of quality, volume and performance and can be used in virtual tour, website, digital catalog, AR/VR applications, online showroom, virtual exhibition and metaverse projects.

KEY CAPABILITIES

- Imaging and producing 360-degree content
- 3D modeling of product, equipment and environment
- Scanning and digital reconstruction of real spaces
- Preparing and optimizing assets for web and XR

INDUSTRY
Advertising, marketing and branding

TECHNOLOGY
Virtual Reality (VR)

View solution details

y-mond.com/en/products/metascan360 ↗

Metanoya · Game Development Studio

Metaverse Game Development

Making a game and interactive metaverse space



Designing and developing games and metaverse spaces with engaging gameplay and expandable technical infrastructure.

Metanoya transforms applicable ideas in metaverse spaces into 3D experiences with engaging gameplay. The development process includes world and narrative design, interaction mechanics, visual identity, and technical infrastructure so that the product is sustainable, scalable, and expandable in addition to being attractive.

These spaces can be designed for entertainment, education, culture, advertising or brand experience. Metanoya's view of the game is not just entertainment; The media game is a medium for conveying the concept and building deep interaction, and for this reason, the metaverse experience is designed based on the purpose, the audience, and the path of the user's participation.

KEY CAPABILITIES

- World design, narrative and metaverse gameplay
- Suitable for entertainment, education and brand experience
- Sustainable and expandable technical development

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Game

View solution details

y-mond.com/en/products/metaverse-game-development ↗

Metanoya · Game Development Studio

VR Game Development

Designing and making virtual reality game



Creating immersive virtual reality games and experiences for entertainment, education, industry and events.

Virtual reality game development at Metanoya focuses on creating immersive 3D worlds and natural user interaction with the environment. The design of scale, sound, movement, controllers and environmental feedback is done in such a way that the presence of the user in the game world is believable and the gameplay is technically stable.

These experiences can be entertainment games, interactive simulators, serious educational games or exhibition attractions and are optimized for the headset and physical space of the destination. The game development team advances game design, programming, art, and user experience in an integrated production line.

KEY CAPABILITIES

- Immersive 3D environment and motion interaction
- Optimization for headset and project execution space
- Design for gaming, education and event

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Virtual Reality (VR) · Game

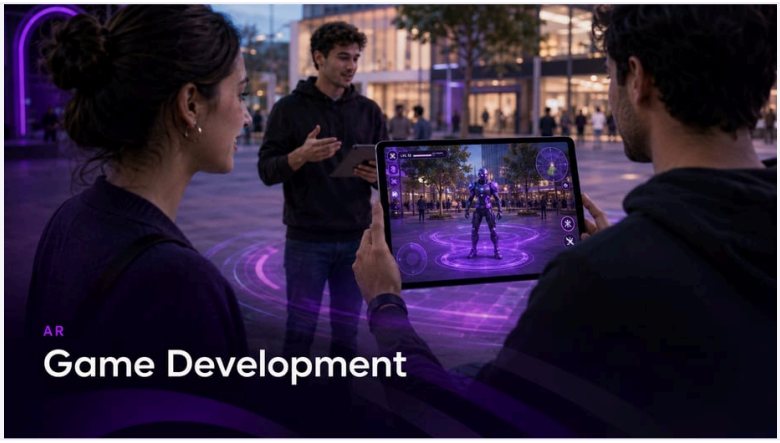
View solution details

y-mond.com/en/products/vr-game-development ↗

Metanoya · Game Development Studio

AR Game Development

Augmented reality game development on mobile and real environment



Development of games that link digital content and gameplay to the real mobile and tablet environment.

Metanoya augmented reality games turn the real environment, camera image and objects around the user into a part of the gameplay. Digital content appears on a mobile or tablet in real space, and the user advances the game by moving, scanning or interacting with environmental cues.

This format is suitable for entertainment, educational, cultural, promotional and brand campaign games; Because the experience is implemented without separating the audience from the real environment and can turn the product, packaging or event space into the entry point of the game.

KEY CAPABILITIES

- Combining digital gameplay with real environment
- Suitable for education, advertising and interactive campaigns
- Applicable on mobile and tablet

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Augmented Reality (AR) · Game

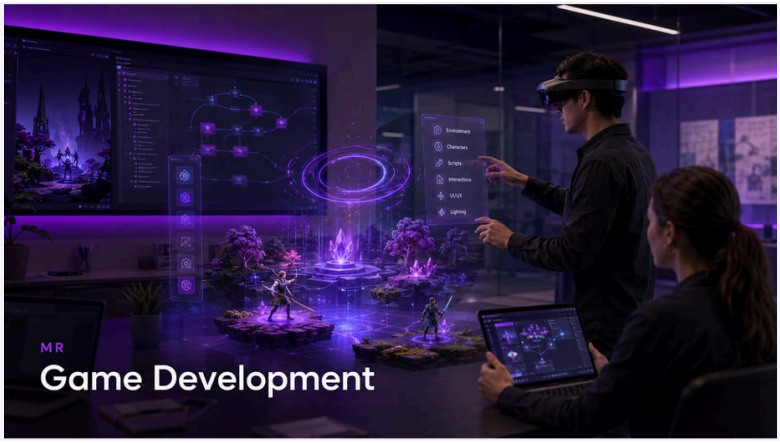
View solution details

y-mond.com/en/products/ar-game-development ↗

Metanoya · Game Development Studio

MR Game Development

Making a mixed reality game and spatial interaction



Designing mixed reality games that make movement, space and real objects part of the game experience.

In a mixed reality game, physical space and real objects are not just backgrounds; They become part of the game logic and user interaction. Metanoya designs experiences that link body movement, user position, and environment structure with characters, missions, and digital elements.

This solution can be developed for mixed reality headsets, exhibition spaces and group experiences and can cover the purposes of entertainment, education or branding. The careful design of the spatial interaction makes the border between the real environment and the game content as natural as possible.

KEY CAPABILITIES

- Simultaneous interaction with real space and digital content
- Suitable for MR headset, exhibition and group experience
- Use of movement, position and environment objects in gameplay

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Mixed Reality (MR) · Game

View solution details

y-mond.com/en/products/mr-game-development ↗

Metanoya · Game Development Studio

PC Game Development

Custom computer game design and development



Designing and producing computer games with standard gameplay, stable technical infrastructure and professional artistic design.

Metanoya develops computer games from idea formation and game design to technical and artistic production. The focus is on standard gameplay, a coherent narrative, professional art design, and an infrastructure that is stable in execution and ready for continued development.

The team's experience in action, horror, adventure, serious and educational games allows the game structure to be chosen according to the target audience and market. Programmers, game designers, artists and user experience specialists in a collaborative process drive the technical quality and attractiveness of the product.

KEY CAPABILITIES

- Gameplay design, narrative and user experience
- Art design and graphics suitable for the style of the game
- Sustainable and expandable technical development

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Game

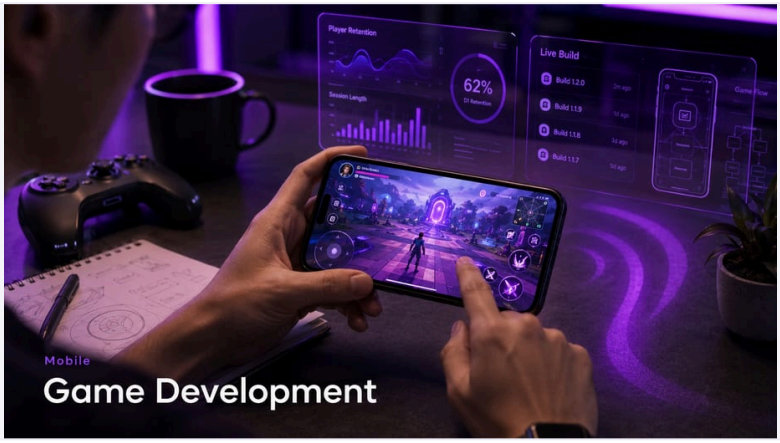
View solution details

y-mond.com/en/products/pc-game-development ↗

Metanoya · Game Development Studio

Mobile Game Development

Designing and making Android and iOS mobile games



Development of entertainment, educational, promotional and cultural mobile games for popular platforms.

Metanoya's mobile game line is designed to transform the idea into a smooth, engaging experience that fits the usage pattern of mobile phone users. Stage design, controls, user interface and technical performance are coordinated with the limitations and opportunities of the mobile platform.

The product can be an independent entertainment game or an educational, cultural and promotional experience. Stable technical architecture and the possibility of content development along with professional art design help the game to be ready for release and growth on popular platforms.

KEY CAPABILITIES

- Exclusive design of control and mobile user interface
- Technical structure ready for content development
- Suitable for entertainment, educational and promotional games

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Game

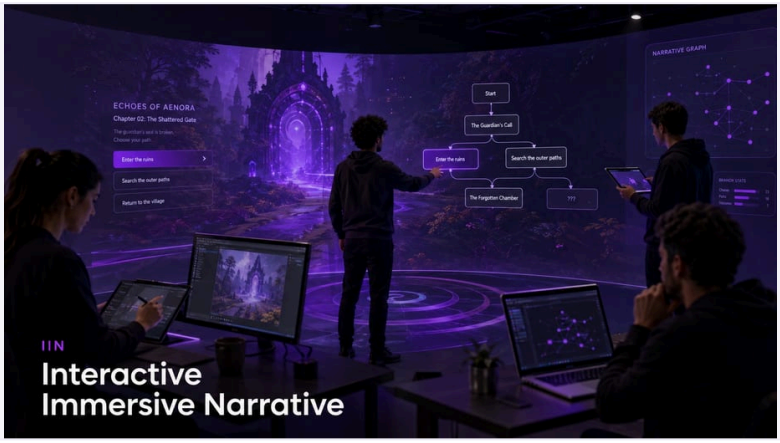
View solution details

y-mond.com/en/products/mobile-game-development ↗

Metanoya · Game Development Studio

Interactive Immersive Narrative

Designing an interactive narrative and immersive story experience



Designing digital and immersive narratives that change user choices and interaction, the course of the story, and the outcome of the experience.

Immersive interactive narrative takes the story off a fixed path and involves the user's choices, movement, and reaction in shaping the continuation of the experience. Metanoya designs the narrative structure, decision points and environmental interactions in such a way that every user feels their presence and effect in the story.

This format can be implemented in VR, AR, MR, mobile, computer or exhibition space and used for cultural narrative, education, brand introduction or entertainment. The combination of storytelling, game design and immersive technologies transform complex concepts into a personal and lasting experience.

KEY CAPABILITIES

- Changing the story path based on the user's choice
- Runs on various platforms and XR
- Combining narrative with spatial interaction and gameplay

INDUSTRY
Game making, gamification and entertainment

TECHNOLOGY
Game

View solution details

y-mond.com/en/products/interactive-immersive-narrative ↗

Dymora · Robotic & Mechanical Hardware Systems

Motion Simulator Platforms

Design and construction of motion simulator platform



Multi-axis motion simulators for recreating driving, flying, industrial machinery and specialized skills training, compatible with VR and XR.

Dymora's motion simulator platforms are multi-axis systems that recreate realistic force and motion for scenarios such as driving, flight, industrial machinery, and specialized skills training. The design of mechanics, electronics, control and software is done in an integrated way so that the movement of the device is synchronized with the simulation events.

These platforms can connect to simulation engines and VR or XR experiences and transmit acceleration, twisting and vibration to the user. The structure of each system is customized based on the application, range of motion, installation space, and educational or entertainment needs of the project.

KEY CAPABILITIES

- Multiaxial motion and physical force reconstruction
- Custom design for education, industry and entertainment
- Connection to simulation engine and VR/XR equipment

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Virtual Reality (VR) · Robotics

View solution details

y-mond.com/en/products/motion-simulator-platforms ↗

Dymora · Robotic & Mechanical Hardware Systems

Robotic Interaction Systems

Design of interactive robot and customized robotic arm



Designing robots and mechanical arms to work alongside humans or interact with users in factories, education, exhibitions and museums.

Dymora Interactive Robotics Systems designs robots and mechanical arms to work alongside humans or interact directly with the user. Dymora's team coordinates mechanics, electronics, control and software in one system so that the robot's movement is precise, safe and suitable for the usage scenario.

These solutions can be used in the factory, exhibition, museum, educational center or brand experience space and develop from the implementation of the planned movement to the intelligent reaction to the presence and behavior of the audience.

KEY CAPABILITIES

- Design of robot and interactive mechanical arm
- Suitable for industry, education, museum and event
- Integration of mechanics, control and software

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Robotics

View solution details

y-mond.com/en/products/robotic-interaction-systems ↗

Dymora · Robotic & Mechanical Hardware Systems

Intelligent Inspection & Vision Systems

Design of intelligent inspection system and industrial machine vision



Machine vision and image analysis systems for production line monitoring, quality control and industrial equipment status analysis.

Dymora's intelligent inspection systems use cameras, image processing and artificial intelligence models to monitor the production line, control product quality and check the status of industrial equipment. The raw image is converted into measurable data to detect errors, deviations or abnormal conditions more quickly.

The solution can be designed as an independent device or a part of the existing automation and has a connection with the control equipment of the line. The architecture of the system is adjusted based on the type of part, process speed, environmental conditions and accuracy required for each project.

KEY CAPABILITIES

- Quality control and defect detection with machine vision
- Can be provided independently or connected to industrial automation
- Monitoring the status of equipment and production lines

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Artificial intelligence (AI)

View solution details

y-mond.com/en/products/intelligent-inspection-vision-systems ↗

Dymora · Robotic & Mechanical Hardware Systems

Interactive Physical Installations

Building interactive installations and brand experience hardware



Designing structures and surfaces that react to the user's touch and movement; Suitable for museum, exhibition, shopping center and brand experience space.

Interactive physical installations transform ordinary structures and surfaces into responsive media that react to a user's touch, movement, or presence. Dymora designs the hardware, sensors, controls and content software to create an integrated physical experience.

These systems are suitable for museum, exhibition, shopping mall, amusement park and brand experience space and can activate group game, educational content, sound, light or image based on audience behavior.

KEY CAPABILITIES

- Reacting to touch, movement and presence of the user
- Suitable for public and experience-oriented spaces
- Composition of structure, sensor, control and digital content

INDUSTRY
Advertising, marketing and branding

TECHNOLOGY
Robotics

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y-mond.com/en/products/interactive-physical-installations ↗

Dymora · Robotic & Mechanical Hardware Systems

Robotic & Smart Mobility Systems

Design of mobile robot and intelligent transportation system



Mobile robots, automated guidance and intelligent fleet management for warehouses, factories and industrial environments.

Dymora's intelligent handling systems include mobile robots, automated guidance and fleet management for warehouse, factory and industrial environments. By receiving environmental data, the system controls the movement path and mission of each robot so that the transfer of materials or equipment can be done with less intervention and more monitoring capability.

The combination of robotic control, artificial intelligence and data analysis enables path optimization, multi-robot coordination and response to environmental changes. The final design is done according to the type of cargo, site map, safety requirements and organization's workflow.

KEY CAPABILITIES

- Mobile robot and automatic guidance
- Path optimization based on environmental data
- Mission and fleet management of robots

INDUSTRY
Mining, steel, industry and production

TECHNOLOGY
Artificial intelligence (AI) · Robotics

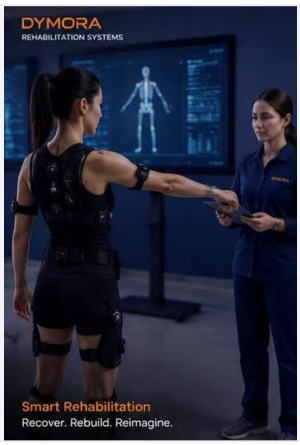
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Dymora · Robotic & Mechanical Hardware Systems

Smart Rehabilitation & Motion Analysis

Movement analysis and interactive rehabilitation system



Motion analysis with cameras, sensors and image processing for rehabilitation and occupational therapy, along with gamification and XR experiences.

Dymora's motion analysis and rehabilitation systems use cameras, sensors, and image processing to measure body movements and evaluate movement exercises. The recorded data can make the movement process more transparent and provide useful feedback to the expert and the user.

The combination of this system with gamification and XR turns the repetitive exercises of rehabilitation and occupational therapy into an interactive and motivating experience. The scenario and difficulty level can be adjusted according to the treatment goal and the user's ability.

KEY CAPABILITIES

- Motion analysis with cameras, sensors and image processing
- Combining gamification and XR to increase engagement
- Interactive feedback for rehabilitation exercises

INDUSTRY
Health, medicine

TECHNOLOGY
Artificial intelligence (AI) · Game

View solution details

y-mond.com/en/products/smart-rehabilitation-motion-analysis ↗

Arassis · Surgical Neuro-Navigation Systems

Aralens

Brain surgery neuronavigation system based on augmented reality



Augmented reality-based neuronavigation intelligent assistant for registering the 3D MRI/CT model on the patient, preoperative planning and precise surgical guidance.

Ara Lens is an advanced neuronavigation platform for neurosurgery that extracts a patient-specific 3D model from MRI and CT data and displays it directly in the surgeon's field of view using augmented reality. The spatial adaptation of the model to the patient's body helps to see the hidden structures, tumor, vessels and tissues more clearly and to choose the access path more accurately.

The preoperative surgeon can plan and save the entry point and surgical path on the 3D model and recall the same plan during surgery in the AR scene. The imaging dashboard also allows zooming, rotation, virtual slicing and panning between MRI/CT views to improve decision-making, patient safety and surgeon control.

KEY CAPABILITIES

- 3D MRI/CT model registration on the patient's anatomy
- Preoperative route and entry point planning
- Intelligent segmentation of tumor, vessels and tissues
- Interactive control of medical images during surgery

INDUSTRY
Health, medicine

TECHNOLOGY
Mixed Reality (MR) · Augmented Reality (AR) · Artificial intelligence (AI) · Neurotechnology

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