WNE
XR LAB

TECHNOLOGY CATALOG

Hardware and Equipment

Applications and Education

Gaming and Education

XR/AI Development

360 Video

WNE
XR LAB

Next-generation standalone MR headset with high-resolution mixed-reality passthrough, advanced hand tracking, and strong performance for education, research, and custom-built XR applications. (Quantity: 15)

Best for:
- Interactive learning modules
- MR simulations
- Unity/Unreal development
- VR sessions

Meta Quest 3

A versatile and accessible standalone VR headset ideal for onboarding, demonstrations, student projects, and mobile VR experiences. (Quantity: 5)

Best for:
- Introductory VR
- Bodyswaps modules
- VR games
- 360° content playback

Meta Quest 2

Enterprise-grade MR headset featuring advanced controllers, face/eye tracking, color passthrough, and improved ergonomics for long-duration work. (Quantity: 1)

Best for:
- Mixed reality development
- Research
- Prototyping
- Human-computer interaction studies

Meta Quest Pro

A professional 8K 360° 3D camera used for high-end VR content creation, photogrammetry workflows, immersive storytelling, and environmental documentation. (Quantity: 1)

Best for:
- 360° educational videos
- Virtual tours
- Field research
- XR content development

Insta360 Pro 2

A high-precision spatial scanning system used to create interactive digital twins of real-world environments with photorealistic accuracy. (Quantity: 1)

Best for:
- Architectural visualization
- Digital twins
- Virtual campus tours
- Engineering design reference

Matterport Pro 3

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Alienware Laptop

Large-format, high-performance laptops capable of running demanding XR applications, Unity/Unreal projects, AI tools, and volumetric capture workflows. (Quantity: 4)

Best for:
- XR development
- VR performance testing
- AI-assisted content creation

Alienware Workstation

High-performance desktop workstations designed specifically for XR content creation, motion graphics, 3D modeling, simulation, and AI/ML workflows. (Quantity: 6)

Best for:
- Course instruction
- Rapid prototyping
- VR simulation development

Dell Precision 7960

Enterprise-grade workstation designed for advanced XR development, large-scale 3D environments, AI workloads, and high-fidelity simulation. (Quantity: 1)

Best for:
- Large Unity and Unreal Engine XR environments
- Digital twin processing
- AI and machine learning experimentation
- Complex simulation, visualization, and research projects

Display Screens

The XR Lab is equipped with a variety of large-format displays and monitors designed to support instruction and immersive experience sharing. These include wall-mounted screens, computer monitors, and a mobile rolling TV stands

Best for:
- Live walkthroughs
- Developer mirroring
- Visitor demos
- Presentations.

Cleanbox Sanitizer

Medical-grade disinfection systems used to sterilize VR headsets and controllers using UV-C light, ensuring safe high-traffic use. (Quantity 2)

Best for:
- high-volume headset sanitation
- Classroom sessions
- Event deployments

WNE XR LAB

Bodyswaps

A soft-skills VR training platform that uses scenario-based learning, role-play, and AI-driven feedback. Fully customizable modules allow faculty to design experiences such as interviews, conflict resolution, patient communication, DEI training, and more. Includes built-in analytics dashboards for assessment.

Departments that might use the software:
- College of Business (Management, Marketing, HR)
- College of Pharmacy & Health Sciences (Patient communication, OSCE simulations)
- College of Arts & Sciences (Psychology, Communication)
- College of Engineering (Leadership & teamwork training)
- Student Affairs, Career Development, and Advising Centers

First Steps

Official Meta Introductory VR experience designed to teach users core headset interactions like grabbing, throwing, and pointing. Great for new student orientations. Includes quality basic interactive XR games and experiences to acclimate new users.

Departments that might use the software:
- All departments
- Orientation, Student Affairs

Gravity Sketch

A 3D design, sketching, and modeling tool used for product design, UX prototyping, and engineering visualization.

Departments that might use the software:
- Engineering
- Computer Science
- Industrial Design
- Business (product design, prototyping)

Float VR

A mindfulness and meditation experience using visual and auditory immersion to support wellness, focus, and stress management. Drift through serene, colorful worlds that promote relaxation, and emotional regulation. This VR journey alleviates anxiety, aids meditation and improves mental health.

Departments that might use the software:
- All Departments
- Psychology
- Student Wellness
- Athletics
- Honors seminars

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Engage

An enterprise-grade virtual reality platform built for education, training, collaboration, and simulation. It allows faculty to create fully interactive VR lessons, import 3D models, record sessions, host multi-user classes, and design realistic simulations.

Departments that might use the software:
- College of Business: Presentations, virtual meetings, leadership training
- College of Engineering: 3D model walkthroughs, interactive design sessions, prototyping
- College of Pharmacy & Health Sciences: Clinical scenarios, OSCE-style simulations
- College of Arts & Sciences: Communication, psychology, media production
- School of Law: Mock trials, courtroom simulations

Ecosphere

Ecosphere is an immersive documentary series. It transports users into rich environments such as the Congo rainforest, the oceans of the Maldives, and the savannahs of Kenya to explore biodiversity, conservation efforts, and global ecosystems.

Departments that might use the software:
- Environmental Science
- Biology
- Education
- Sustainability Programs
- Student Activities (engagement demos)
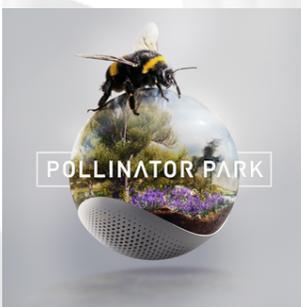
Pollinator Park

Pollinator Park is an interactive VR experience created by the European Commission that places users in a futuristic conservation sanctuary. It raises awareness about the global decline of pollinators through storytelling, immersive exploration, and environmental design.

Departments that might use the software:
- History
- Humanities
- Education
- Diversity & Inclusion programming

ShapesXR

ShapesXR is a powerful VR design and collaboration platform for building 3D storyboards, UI/UX prototypes, spatial designs, and early-stage product concepts. It allows multiple users to co-create in real time and export designs to Unity, making it a strong tool for XR development education.

Departments that might use the software:
- Engineering
- Computer Science & Game Development
- Marketing (creative prototyping)
- Entrepreneurship & Innovation
- Business (product design, service design)

WNE XR LAB
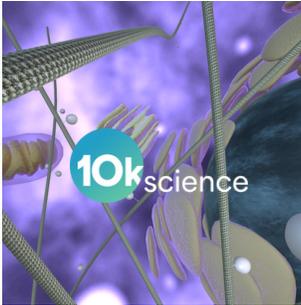
Immersive science lessons covering topics such as biology, chemistry, and physics through interactive models and environments.
- Discover and see the CRISPR treatment for sickle cell disease.
- Zoom into a soda and pizza to see what's it's made out of.
- Investigate how a microscopic insect is causing a vineyard's plants to wilt.

Departments that might use the software:
- Arts & Sciences (Biology, Chemistry, Physics)
- Education
- Engineering intro courses

10k Science

A high-fidelity simulation of the International Space Station, allowing users to walk through modules, conduct missions, and learn about orbital science. Dock a space capsule, take a spacewalk, and let real NASA astronauts guide you on the ISS through info videos and images.

Departments that might use the software:
- Physics
- Aerospace engineering topics
- Education
- Honors Program

Mission ISS

A deeply immersive historical reconstruction of the Secret Annex where Anne Frank hid during WWII. Immerse yourself in Anne's thoughts as you traverse each faithfully recreated room, thanks to the power of VR, and find out what happened to the Annex' brave inhabitants.

Departments that might use the software:
- History
- Humanities
- Education
- Diversity & Inclusion programming

Anne Frank House VR
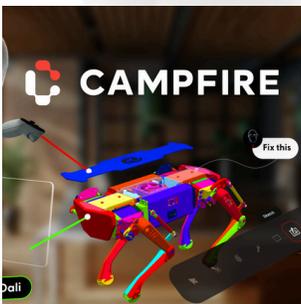
A collaborative mixed-reality platform for reviewing 3D models, engineering designs, prototypes, and CAD files in shared space. The best way to communicate 3D information across the physical product lifecycle.

Departments that might use the software:
- Engineering
- Computer Science
- Business (operations & manufacturing systems)

Campfire

WNE XR LAB
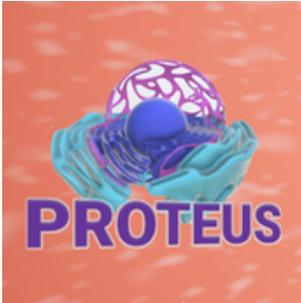
Proteus is a highly detailed, interactive VR anatomy platform that allows students to explore body systems, dissect structures, visualize organs, and understand physiology using accurate 3D models. Ideal for supplementing cadaver labs or supporting pre-clinical training.

Departments that might use the software:
- College of Pharmacy & Health Sciences (Anatomy, Physiology, Pathophysiology)
- Biology & Neuroscience
- Nursing / Pre-Med pathways
- Athletic Training & Physical Therapy
- Education (science teaching modules)

Proteus

Travel virtually to Dell Technologies' HCI Innovation Lab in Texas. This experience highlights partnerships with Intel, NVIDIA, and AMD, exploring everything from deep space missions to breakthroughs in the human genome. (Created by Link To VR)

Departments that might use the software:
- Computer Science
- Engineering
- Biology & Neuroscience
- Business (marketing, operations & manufacturing systems)

HCI AI Innovation Lab

In this guided MR tour, NVIDIA's AI assistant "Andy" introduces users to the company's cutting-edge CPU and GPU innovations. Experience cloud computing infrastructure and digital twins of real-world hardware in a futuristic XR showcase. (Created by Link To VR)

Departments that might use the software:
- Computer Science
- Engineering
- Biology & Neuroscience
- Business (marketing, operations & manufacturing systems)

NVIDIA MR Digital Assistant

A rhythm-based fitness and music experience where users slash blocks to the beat. Great for engagement, demos, and introductory XR activities.

Departments that might use the software:
- Any Department
- Athletics / Fitness
- Student Activities
- Psychology
- Engineering

Beat Saber

A fear-of-heights simulation that places users on a plank atop a skyscraper. Excellent for demonstrating immersion, presence, and exposure therapy concepts.

Departments that might use the software:
- Psychology
- Engineering (VR immersion research)
- Student Activities
- Honors Program experiences

Richie's Plank Experience

Oculus First Contact is an interactive VR experience designed to teach users the core mechanics of virtual reality through a playful, hands-on tutorial. Set in a retro-futuristic environment, users learn how to use controllers, manipulate tools, and interact with a friendly robot companion.

Departments that might use the software:
- All Departments (general VR onboarding)
- Student Affairs (orientation programs)
- Education (teaching technology foundations)

First Contact

A VR painting, sculpting, and VFX art tool originally based on Google Tilt Brush. Supports creative exploration, 3D art, and animation.

Departments that might use the software:
- All Departments
- Arts & Sciences (Art, Graphic Design, Creative Media)
- Engineering (3D design, prototyping)
- Marketing (creative content production)

Open Brush

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A cooperative communication game where one player in VR must defuse a bomb using a complex manual that only the other players can read. The experience strengthens teamwork, communication, problem-solving, and leadership under pressure.

Departments that might use the software:
- Business (leadership, communication, teamwork)
- Psychology (group dynamics, cognitive load)
- Engineering / CS (HCI demonstrations)
- Student Activities (community events)

Keep Talking and Nobody Explodes

TableCraft is a physics-based sandbox environment that encourages experimentation, engineering thinking, and discovery learning. Users build contraptions, interact with objects, and explore how forces, motion, and materials behave.

Departments that might use the software:
- Engineering (mechanics, physics concepts)
- Physics & Applied Science
- STEM Education programs

Tablecraft

Open Blocks is a creative VR building environment where users place, stack, and manipulate blocks to explore spatial reasoning, logic, and problem-solving. Great for STEM education and prototyping simple structures.

Departments that might use the software:
- All Departments (general VR onboarding)
- Education (STEM teaching)
- Engineering (spatial visualization)
- Computer Science (logic + HCI concepts)

Open Blocks

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Unity

Unity is a leading real-time 3D engine used to build VR, AR, MR, games, simulations, and interactive applications. It supports XR development, 3D asset integration, physics, scripting (C#), and deployment to multiple devices including Meta Quest.

Departments that might use the software:
- Computer Science (game dev, XR dev, simulation)
- Engineering (prototyping, visualization)
- Art & Media (interactive design, VFX)
- Business (entrepreneurship, product prototyping)

Blender

Blender is a free, open-source 3D creation suite for modeling, animation, sculpting, rigging, texturing, and rendering. Frequently used for building assets for Unity, Unreal, VR projects, and 3D printing workflows.

Departments that might use the software:
- Art & Graphic Design
- Engineering (CAD-style modeling, prototyping)
- Computer Science (3D asset pipelines)
- Marketing (animation, product visuals)

8th Wall

8th Wall is a powerful web-based AR development platform that enables creators to build browser-based AR experiences without requiring an app download. Supports SLAM, world tracking, face effects, and WebXR deployment.

Departments that might use the software:
- Computer Science (WebXR, AR programming)
- Engineering (prototyping / spatial computing)
- Marketing (brand activations, AR campaigns)
- Business (experiential marketing, customer engagement)

Tripo 3D

Tripo 3D is an AI-powered 3D model generator that converts images or prompts into ready-to-use 3D assets for VR, AR, games, and simulations. Ideal for rapid prototyping and asset creation workflows.

Departments that might use the software:
- Computer Science / Game Development
- Engineering (concept models, rapid ideation)
- Marketing & Creative Media
- Art & Design (3D creation, visualization)

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ChatGPT

ChatGPT is an advanced generative AI assistant capable of drafting content, writing code, analyzing data, generating ideas, building lesson plans, helping with research, and supporting creative XR workflows. Integrates well with Unity, Blender, and pipeline automation.

Departments that might use the software:
- All departments (general productivity & research)
- Computer Science (AI integration, LLM workflows)
- Marketing (copywriting, strategy, ideation)
- Engineering (code generation, documentation)
- Pharmacy & Health Sciences (study tools, simulations)

Gemini

Gemini is Google's multimodal AI model and productivity suite, capable of analyzing images, code, data, and text simultaneously. Useful for research, summarization, prototype generation, software engineering, and integrated XR workflows within Google's ecosystem.

Departments that might use the software:
- Computer Science (AI/ML, multimodal workflows)
- Engineering (design analysis, coding support)
- Business & Marketing (content, analytics, automation)
- Education (curriculum support, research)
- Sciences (image/data interpretation)

Copilot

Copilot is an AI productivity assistant integrated across Windows, Microsoft 365, and the web. It can generate text, summarize documents, write code, assist with data analysis, and support research.

Departments that might use the software:
- Business (writing, research, marketing, analytics)
- Computer Science / Engineering (coding assistance, documentation)
- Pharmacy & Health Sciences (study support, summarization)
- Education (lesson planning, curriculum development)
- All departments for general productivity

Matterport

Matterport is a powerful 3D scanning and digital twin platform used to capture real-world spaces and turn them into immersive, navigable 3D models. Ideal for virtual tours, space planning, architectural visualization, crime scene reconstruction, and educational site exploration. The XR Lab's Matterport Pro cameras support high-resolution scans for academic use.

Departments that might use the software:
- Engineering (built environment, visualization, digital twins)
- Business (real estate, operations, facilities management)
- Architecture / Interior Design
- Marketing & Communications (interactive media)

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Insta360 Studio

Insta360 Studio is the official desktop editing software for Insta360 cameras, supporting 360° video stitching, reframing, stabilization, color correction, and export for immersive VR playback. It is essential for preparing 360° footage used in XR storytelling, research, and educational simulations.

Departments that might use the software:
- Communication / Media / Film (360° video production & editing)
- Engineering (documentation, environmental scanning)
- Business & Marketing (immersive content creation, experiential marketing)
- Education (VR storytelling, classroom content)

Youtube VR

YouTube VR provides access to thousands of immersive 360° videos, VR documentaries, educational content, virtual field trips, and experiential media. Users can explore environments, science concepts, global cultures, and historical locations directly through the VR headset.

Departments that might use the software:
- All departments
- History & Humanities (cultural experiences, historical sites)
- Education (virtual field trips, media literacy)
- Student Activities & Engagement

Commedia VR Video Player

Commedia is a VR media player designed to play 180°, 360°, stereoscopic, and standard VR-compatible video files. It supports high-quality playback, multiple viewing modes, and local file loading—making it ideal for faculty or researchers who need to showcase custom 360° content within the Quest headset.

Departments that might use the software:
- All Departments (general VR onboarding)
- Communication / Media / Film (360° production review)
- Engineering & CS (testing immersive video pipelines)
- Admissions / Marketing (custom VR presentations)

4K Video Downloader +

4K Video Downloader is a desktop application that allows users to download high-quality online videos, including 4K and 8K resolution, 360° content, and VR-compatible media from platforms such as YouTube. It is especially useful for importing educational 360° or VR videos into the XR Lab environment for playback in apps like Commedia or YouTube VR.

Departments that might use the software:
- All Departments (general VR onboarding)
- Education (curating VR lessons and field trip content)
- Communication / Media / Film (360° production review)
- Admissions / Marketing (custom VR presentations)

Expedition Everest: The Science

Embark on this virtual reality experience with an international coalition of biologists, geologists, glaciologists, meteorologists, and geographers as they study the effects of climate change in one of the most extreme environments on Earth. The National Geographic and Rolex Perpetual Planet Everest Expedition begins at 17,300 feet at Base Camp and ends above 27,000 feet, near the summit of Mt. Everest.

Expedition Everest: The Mission

Immerse yourself with a team of scientists, climbers, and Sherpa guides as they embark on an expedition that will help define our understanding of high-mountain environments. Experience the National Geographic and Rolex Perpetual Planet Everest Expedition, which was not simply a climb of the mountain, but a perilous adventure to learn how climate change is impacting the highest place on Earth.

New York City VR Tour — 360° Cityscape & Street View

An immersive 360° VR walkthrough of New York City's streets and landmarks, offering a "on foot" virtual exploration of urban architecture, city layout, real-world street views, and city ambience. Great for exploring urban design, city planning, cultural geography, or simply for students to experience a major city environment in VR.

Virtual Nature 360° - Nature Meditation for VR

A 360° celebration of nature at its finest! Filmed professionally in 6K resolution. Take a relaxing journey through pristine Tasmanian waterfalls, swim through an underwater cave off the coast of Africa, and stand on the edge of the Grand Canyon. Immersive yourself in a timeless world and be swept away by the natural sounds and gentle guitar.

Take a Virtual Reality tour of six REAL exoplanets

What would it be like to stand on the surface of another planet? We teamed up with astrophysicists to create a scientifically accurate, VR tour of 6 exoplanets.

Northern Lights, Manpupuner Rock Formations

This AirPano video will tell you about a magnificent natural landmark worthy of global recognition: the Manpupuner rock formations, the stone idols in the Troitsko-Pechorsky district of the Republic of Komi.

Coral World. Underwater Paradise.

Corals can boast a palette of nearly 350 shades. However, it is rather difficult to see coral reefs in their full glory underwater. As water much better lets in short wavelengths of the spectrum, blue and green light, underwater shooting shows objects in changed colors and the entire surrounding scenery turns greenish blue.

Venice Guided Tour in 360°

You can virtually visit stunning St. Mark's Square and St. Mark's Basilica or famous Rialto Bridge. The 360° tour will also take you to see Doge's Palace, Basilicas del Frari or di Santa Maria Della Salute and colorful Burano Island. You can even buy a carnival mask or take a virtual gondola ride on this city tour.

360° VR Journey to the Core of the Whirlpool Galaxy

In this 360 VR simulation we are taking a stunning space journey to the core of the famous whirlpool galaxy. The Whirlpool Galaxy, also known as Messier 51a, M51a, and NGC 5194, is an interacting grand-design spiral galaxy with a Seyfert 2 active galactic nucleus. It lies in the constellation Canes Venatici, and was the first galaxy to be classified as a spiral galaxy.