

APPENDIX 1: Profesional Information +Activities - FRANZ FISCHNALLER

I. CURRENT FOCUS

Franz Fischnaller (FF) specializes in extended reality (XR) technologies and applications, including augmented reality (AR), virtual reality (VR), mixed reality (MR), artificial intelligence (AI), machine learning, the Internet of Things (IoT), AI avatars, digital humans, virtual beings, and holography. He is committed to developing immersive AI/XR holographic mixed-reality experiences and exhibits by integrating AI Renaissance avatars that blend holographic, interactive, and augmented realities within the metaverse. His work focuses on AI and XR scenography, real-time telepresence with Renaissance AI/XR 3D avatars, and mixed virtual reality storytelling using advanced holographic graphical user interfaces.

TIME SPACE SYSTEM (TSS – Ongoing Project)

The Time Space System (TSS) project is an advanced system integration initiative led by Franz Fischnaller in collaboration with MECHDYNE Corporation, based in London, England. This ongoing project leverages state-of-the-art technologies, systems, and tools while fostering international collaboration with key companies, teams, and software houses. Contributors include, but are not limited to:

MICROSOFT Google Gemini | Alphabet | OpenAI | NVIDIA | Qualcomm Technologies | IMMERSIA, IRISA, INRIA | SOUL MACHINE | Marvel Studios, LLC | Walt Disney Studios | Institut Europa | Leonardo Supercomputer, CINECA | UneeQ | MP Mimic Productions | Unity Technologies | Unreal | Blender | ChatGPT | DEEPSEEK | ADOBE | Barco | Sony | Samsung | Panasonic | Cisco | etc.

II. KNOW-HOW AND DISCIPLINES (SUMMARY)

Franz Fischnaller (FF) is a highly versatile professional and scholar with extensive expertise across multiple disciplines, including:

- Arts, design, and architecture
- Technology, science, and engineering
- Humanities, cultural heritage, and social sciences

His work is dedicated to fostering innovative connections among these diverse fields and advancing creative, technological integration.

III. MULTIFACETED PROFESSIONAL ENGAGEMENTS

FF is actively engaged in various areas, including:

- Teaching and academia
- Art, design, and creation
- Development, art direction, and project production management
- Curation and consulting
- Cross-disciplinary media design advising

IV. ROLES

He serves in multiple roles, such as:

- Professor and educator
- Designer and developer
- Art director and project manager
- Curator and consultant
- Media design advisor
- Author and cross-disciplinary media artist

His holistic approach unites art, science, and technology to shape immersive narratives and foster innovative cultural experiences.

V. PROFESSIONAL ACTIVITIES

Franz Fischnaller offers specialized services tailored to the unique needs of private companies, museums, and cultural institutions. His expertise spans:

- Custom design solutions based on client requests
- Thematic applications and content creation
- Storytelling for immersive experiences
- Development of interactive and new media exhibitions

As an art director and project production manager, Franz specializes in content production and exhibit design for digital humanities projects, interactive exhibits, and installations. He also creates innovative new media exhibit designs that push creative boundaries.

Beyond his design work, Franz serves as a consultant and media design advisor, providing insights to shape forward-thinking projects. His strategic development and project management skills help optimize operational efficiency and enhance visitor engagement. By working closely with clients and teams, he crafts customized solutions that enrich cultural narratives and strengthen community connections.

Whether curating exhibitions or designing educational programs, Franz is committed to elevating the cultural landscape and supporting partners in their mission to inspire and educate.

For seven years, he has also served as an expert evaluator for cultural heritage and digital media project submissions at the European Commission's Research Executive Agency in Brussels, Belgium

MORE INFORMATION ON PROFESSIONAL ACTIVITIES, KNOW-HOW, AND SERVICES

Tailored Experiences & Cutting-Edge Exhibitions Franz Fischnaller transforms visions into immersive realities. Specializing in custom services for private companies, museums, and cultural institutions, he creates bespoke digital storytelling experiences tailored to each client's unique needs. From concept development to thematic applications, his work merges art and technology to produce groundbreaking interactive exhibitions that captivate audiences and redefine engagement.

Expert Art Direction, Project Management & Strategic Consulting As a visionary art director and project manager, Franz orchestrates digital humanities projects, interactive installations, and new media exhibits with precision and innovation. Beyond design, he offers strategic consulting and media advisory services that enhance project efficiency and deepen cultural narratives. His seven-year tenure as an evaluator for the European Commission's Research Executive Agency in Brussels solidifies his ability to assess, shape, and elevate digital heritage projects.

Innovative Media Creations & Pioneering Authorship His cutting-edge portfolio encompasses content development, immersive media, and advanced visualization techniques, including:

- **Gigapixel & 8K VR Experiences:** Transporting viewers into ultra-high-resolution, immersive worlds.
- **3D Digital Stereo Animation:** Elevating narratives through advanced visual storytelling.
- **Holographic Installations:** Bringing real-time augmented telepresence to life.
- **Architectural Simulations:** Crafting virtual environments with avatar-guided walkthroughs.
- **360° VR Narratives:** Redefining engagement through fully immersive experiences.

Designed for adaptability, his works seamlessly integrate with platforms ranging from expansive virtual reality spaces to sophisticated 3D visualization displays. By harnessing the power of extended reality (XR) and AI-driven avatars, Franz continues to pioneer new dimensions in interactive media—shaping cultural legacy through digital innovation.

VI. AREAS OF EXPERTISE AND KEY COMPETENCIES

Narratives and Storytelling: Techniques, Media, and Methods

- Exploration of innovative storytelling techniques and digital narratives
- Integration of interactive storytelling methods in various media formats

Art, Visualization, Technology, and Science

The convergence of visual art, advanced visualization, and technological media spans the domains of media art and digital aesthetics.

Digital Narratives and Interactive Storytelling

- Advanced techniques for enhancing storytelling through digital formats
- User interaction design and interactive methods for engaging narratives

Content Development

Specializing in the design and aesthetic visualization of digital environments, including:

- 3D and 2D Computer Graphics
- Video and Digital Animation
- Motion Graphics
- Digital Photography
- Micro-Macro Imaging

Visual and Mixed Reality Effects (VFX) & Communication

Expertise in immersive and interactive visualization technologies such as:

- Virtual Reality (VR)
- Augmented Reality (AR)
- Mixed Reality (MR)

Immersive Visualization Technologies: Methodologies and Tools

Covering interactive systems, methodologies, and instruments, including:

- Stereo visualization technologies and techniques
- 3D stereoscopic animation and video mapping
- 360° Virtual Reality (VR) and interactive video experiences
- 3D immersive point cloud visualizations
- Multi-viewpoint audiovisuals and multi-sensory experiences
- Gigapixel immersive visualization for ultra-high-resolution data
- Mixed reality live interactive performances
- Networked storytelling and interactive digital narratives

Additional areas of expertise include:

- Interactive installations and immersive audiovisual experiences
- VR and AR simulations for various applications
- Mixed media digital projects
- 3D architectural simulations and virtual walkthroughs

Augmented Reality-Based Interactive Holography

Development of augmented reality-driven live stage presentations, choreographed holographic performances, and physical-virtual environments. Innovations integrating AI and mixed reality enhance immersive storytelling and digital narratives, featuring:

- AI avatars and real-time VR content
- Interactive avatars and virtual beings with realistic simulations in VR/AR environments
- Virtual prototypes and immersive 3D industrial designs
- Augmented presentations with holographic effects
- XR/AI-driven performances and choreographed narratives

Immersive stereo visual development applies to various domains, including architecture, fantasy, and creative simulations. Additionally, holographic and mixed media installations integrate real-time telepresence, further advancing XR and AI-driven experiences.

VII. TEACHING ACTIVITIES & PROFESSORSHIPS (SELECTED)

For **five years**, **Franz Fischnaller** served as a **full professor** at the **School of Art & Design** at the **University of Illinois at Chicago (UIC)**. During his tenure, he **established the Virtual Reality Facility Lab** within the **Electronic Visualization Program** in the **College of Architecture and the Arts**, in collaboration with the **Electronic Visualization Lab (EVL)** in UIC's **College of Engineering**.

EVL & The CAVE™ Virtual Reality Environment

The **Electronic Visualization Lab (EVL)** is a **pioneering research lab** renowned for its development of the **CAVE™ Automatic Virtual Environment**, the **first fully immersive and interactive VR theater** designed for **multiple users**.

EVL played a **key role** in developing the **first CAVE designed for public engagement**, installed at the **Ars Electronica Center (AEC)** in **Linz, Austria**, making **immersive VR accessible to a broader audience**.

With **exceptional virtual reality capabilities** in **computational science and engineering**, the CAVE received **national recognition**, including extensive coverage at **SIGGRAPH**, where media outlets interviewed attendees. The overwhelmingly positive feedback underscored the **CAVE's transformative impact on VR technology**.

The CAVE's Influence in Research & Industry

- **Larry Smarr (NCSA) & Rick Stevens (Argonne National Laboratory)** built **CAVEs** to help researchers interact with large-scale 3D data simulations.
- **EVL assisted the U.S. Department of Defense's ARPA** in creating **CAVE #4** for its **Star Trek-themed Enterprise room**, showcasing **advanced technologies for VIP visitors**.
- **General Motors Research** recognized the **CAVE as a critical tool for vehicle design and rapid prototyping**, leading to a partnership with **EVL** to develop **VisualEyes software**.
- **Pyramid Systems**, later acquired by **FAKESPACE** and **MECHDYNE Corporation**, licensed the **CAVE for commercialization**, further expanding its influence.

Additional Academic Positions and Activities (Selected)

- **Professor** Albertina Academy of Fine Arts, Turin, Italy
- **Guest Professor** Department of Graphical Systems, Vilnius Gediminas Technical University, Lithuania
- **Guest Lecturer** Department of Architecture and Territory (d'ArTe), Mediterranean University, Reggio Calabria, Italy
- **Professor** European Institute of Design (IED), Milan, Italy
- **Professor** European Institute of Design (IED), Turin, Italy
- **Lecturer** Faculty of Architecture I, Polytechnic University of Turin, Italy
- **Guest Lecturer** Department of Media, Media Lab, School of Art and Design, Aalto University, Helsinki, Finland
- **Visiting Scholar** School of Design, Victoria University of Wellington, New Zealand
- **Visiting Scholar** Master's Program in Multimedia, RAI Radiotelevisione Italiana and Mediateca Regionale, University of Florence, Italy
- **Contributor** High-Performance Network Interaction Laboratory, Faculty of Engineering, University of Essex, UK, and G-SCOP Laboratory, Grenoble Institute of Technology, France (*EU-FP7 VISIONAIR project – Vision Advanced Infrastructure for Research*)
- **IMéRA (Mediterranean Institute for Advanced Research)** Aix-Marseille University, France
- **Map Lab-Centre, Équipe MAP-Gamsau CNRS Campus, Marseille, France & Museum of European and Mediterranean Civilizations (MuCEUM)**

VIII. RECOGNITIONS & PUBLICATIONS

Selected Awards, Commissions, Prizes, and Scholarships

- **Winner of the Multimedia Grand Prix – Foreign Title Award, Japan**
- **Recipient of three Prix Ars Electronica Mention Prizes – Interactive Art Category**
Recipient of the Interactive Art Mention Prize – Prix Ars Electronica, Ars Electronica Center, Linz, Austria
- **Innovative Award in Art, Humanities, and Technology – Salone dell'Innovazione**, Milan, Italy
- **Juried Film Selection – SIGGRAPH 2009: Computer Animation Festival**, USA
- **Research, Development, and Sponsorship Award – National Museum of Science and Technology, Leonardo da Vinci**, Milan, Italy for the Last Supper interactive project (LSI) This award was granted for the development of one of the initial phases of the LSI Project. The LSI Project was later selected for display in the exhibition "Innovation of the Year" at the same museum.

IX. ART DIRECTOR, CURATOR, MANAGEMENT ORGANIZATION OF EXHIBITS, EXHIBITIONS, VENUES, SPECIAL EVENTS, FOR DIGITAL CENTERS, MUSEUMS, UNIVERSITIES AND CULTURAL INSTITUTIONS, CITY CENTERS (SELECTED)

Focus: art, design, architecture, science, engineering, technology, cultural heritage, and sustainability.
(Selected Positions)

Media Art Director at the Digital Media Center, Kunstkraftwerk, Leipzig, Germany.

A former power station will be converted into a multidisciplinary digital art center measuring 32 by 16 meters and 12 meters high. The projected area covers 1,200 square meters and has a resolution of 21,840 by 2,000 pixels.

Virtuality & Interactivity I and II

Curatorship and Direction two consecutive editions of the Mediartech venue titled "Virtuality and Interactivity: Digital Renaissance (V&I)" in Florence, Italy.

Mediartech is an annual international event combining commercial advancement, research, and cultural elements. It features a fair, various venues, lectures, and conferences. The event emphasizes innovation across multiple fields, including technology, engineering, and science, while showcasing their connections to cultural heritage, visual arts, cinema, and the broader arts. Mediartech hosts experts, companies, industries, universities, and research centers worldwide, establishing itself as a significant platform for showcasing innovation. Funded by the Regional Government of Tuscany and the Tuscany High Technology Regional Network. It also receives support from several international groups and institutions.

Version 03 – Technotopia: Digital Arts Convergence at The Museum of Contemporary Art, Chicago, USA.

The venue was articulated by talks, a panel, and Immersive exhibits. "The Post-Realistic Age: The Generation of Super Broadband Communication and Gigabit Networking " was held in the MCA Theater, Chicago, USA, in collaboration with the University of Illinois at Chicago (UIC) and Northwestern University (NWU).

Note: More information related to direction, curatorship, management, and organization for art center exhibits, venues, and festivals can be provided.

X. Selected Appointments in Art Direction, Curatorship, and Exhibition Management Focus Areas: Art, Design, Architecture, Science, Engineering, Technology, Cultural Heritage, and Sustainability

Positions and Projects

1. **Media Art Director – Digital Media Center, Kunstkraftwerk, Leipzig, Germany** A former power station is being transformed into a multidisciplinary digital art center. The venue measures 32 m by 16 m with a 12 m height, covering 1,200 m², and features digital projections at a resolution of 21,840 by 2,000 pixels.

2. **Virtuality & Interactivity I & II – Florence, Italy** As Curator and Director, Franz Fischnaller led two consecutive editions of the Mediartech event titled “Virtuality and Interactivity: Digital Renaissance (V&I).”
3. **Mediartech – International Event** Mediartech is an annual event that merges commercial innovation, research, and cultural programming. It includes a fair, multiple venues, lectures, and conferences, and emphasizes innovation across technology, engineering, science, cultural heritage, visual arts, cinema, and other artistic disciplines. The event gathers experts, companies, industries, universities, and research centers from around the globe. It is funded by the Regional Government of Tuscany and the Tuscany High Technology Regional Network, and it receives support from several international organizations.
4. **Technotopia: Digital Arts Convergence (Version 03) – The Museum of Contemporary Art, Chicago, USA** This initiative featured panel discussions and immersive exhibits under the theme “The Post-Realistic Age: The Generation of Super Broadband Communication and Gigabit Networking.” The event was held in the MCA Theater in collaboration with the University of Illinois at Chicago (UIC) and Northwestern University (NWU).

Additional Information Further details regarding my work in direction, curatorship, management, and the organization of art center exhibits, venues, and festivals are available upon request.

XI. BOOKS & EDITED WORKS

e-Art | Art | Net | Technology | Society | Democracy Published by Riuniti Editori, Rome, Italy. This book features interviews, essays, and articles from forty visionaries, pioneers, authors, researchers, and practitioners across culture, art, science, engineering, technology, humanities, social sciences, and human rights. Notable contributors include Nobel Peace Prize laureate Rigoberta Menchú, virtual reality pioneer Jaron Lanier (named one of TIME's 100 Most Influential People in 2010), and Howard Rheingold.

Expanding the Frontiers of Utopia: From the Digital Renaissance to the Space on Earth Project Edited by Franz Fischnaller and published by Electa Mondadori, Italy (Catalogue).

Catalogues & Exhibition Publications

Virtuality & Interactivity II: MediARTEch International Exhibition of Virtual Installations and Applications, produced for Rete Regionale dell'Alta Tecnologia, Florence, Italy (Catalogue).

Magazine & Journal Articles

- **CityCluster: From the Renaissance to the Megabyte Networking Age** Featured on the cover page of *Presence: Teleoperators and Virtual Environments*, Volume 14, Issue 1, MIT Press, Cambridge, MA.
- **Technology in the Arts, Humanities, and Cultural Heritage: Immersive Museums – The Architecture of the Senses** Published in *Giornale Kermes* by Nardini Editore, France & Italy, with contributions from Sorbonne Universités (LAMS, VALE, POLYRE).

Additional Information

Further details on publications, lectures, conferences, seminars, workshops, and presentations are available on request. Additional materials include:

- Books and book chapters
- Conference papers and proceedings
- Research papers and essays
- Articles and introductions for books and catalogues

VIII. FF Personal Works, Projects & Dissemination Exhibits: Exhibits, Venues, Screenings, Presentations, Publications

Franz Fischnaller (FF) has created, developed, and produced a wide range of works that have garnered international attention. His projects have been showcased at numerous conferences, museums, exhibition centers, and prestigious venues, and have been featured in various publications. Further info can be provided

XII. FF's APPROACH AND METHOD

- **Creative Thinking:** Engaging in problem-solving and strategic practices that drive innovation.
- **Cross-Fertilization:** Encouraging creative experimentation within design processes.
- **Intersections of Arts, Sciences, and Technology:** Merging disciplines innovatively to foster creativity.
- **Interdisciplinary Collaborations:** Building joint efforts across the arts, digital media, humanities, and social sciences.
- **Collaborative Methodologies:** Developing models of collaboration that effectively integrate diverse disciplines.
- **Research Models:** Implementing approaches that promote cross-disciplinary collaboration in projects.
- **Building Creative Collaborations:** Fostering efficient and innovative partnerships across various fields.
- **Creative-Based Design Methodologies:** Utilizing interdisciplinary strategies for project conception and development.
- **High-Quality Project Design:** Focusing on digital heritage content and immersive digital media experiences.
- **Core Skills in Project Design:** Integrating storytelling, narrative principles, techniques, technologies, and methods.
- **Content and Application Creation:** Developing digital narratives and storytelling experiences in formats that are digital, virtual, interactive, immersive, or non-immersive.
- **Project Development and Production Management:** Overseeing projects from conception to execution with a focus on quality and innovation.

This approach clarifies the importance of collaboration and innovation across diverse disciplines, particularly within the realms of creative and digital endeavors

XIII. KEY AREAS OF FOCUS ACROSS THE DIFFERENT PRACTICE

Commitment to Lifelong Learning & Interdisciplinary Collaboration

- Fostering a culture of **creativity, innovation, and practicality**
- Integrating **diverse knowledge** to enhance **collaborative thinking, problem-solving, and strategic planning**
- Applying **practical expertise and thorough analysis** to develop **unique, functional, and innovative solutions**
- Encouraging **creative thinking, cross-disciplinary collaboration, and knowledge integration**

- Developing **strategies, methodologies, and best practices** through **cross-fertilization and creative experimentation**

Interdisciplinary Collaboration & Innovation

- Advancing **interdisciplinary collaborations** across **arts, digital media, humanities, sciences, and technology**
- Strengthening the **intersection of art, science, and technology** to drive innovation
- Promoting **collaborative experimentation** through **design approaches that unify art, science, and technology**

Cross-Disciplinary Research & Methodologies

- Developing **models and methodologies** that enhance interdisciplinary collaboration
- Establishing **efficient research frameworks and approaches**
- Strengthening **team collaboration** in cross-disciplinary projects
- Implementing **creative-based design methodologies** for **effective interdisciplinary engagement**
- **Designing strategies, models, and approaches for cross-disciplinary project development**

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