DAVID GOCHFELD

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Award-winning multidisciplinary artist, technologist, researcher and educator specializing in immersive storytelling and live performance with extended reality technologies. Experienced in leading interdisciplinary research and development projects involving academic, industry and cultural partners. Principal Investigator on funded research projects, creator of award-winning immersive experiences, and author of peer-reviewed research on creative technology adoption, digital performance and immersive storytelling. Publication venues include ACM SIGGRAPH, Creativity & Cognition, IEEE GEM, and Contemporary Theatre Review. Creative practice recognized with official selections at Tribeca, Venice, Future of Storytelling and Raindance Immersive festivals. Awards include an Emmy in Outstanding New Approaches: Documentary.

My research examines how creative practitioners evaluate and integrate emerging technologies including XR, motion capture, virtual production and AI into creative workflows. Through collaborations with theatre companies, cultural organisations and technology partners, I investigate how these technologies can support rehearsal, production and storytelling while remaining responsive to the realities of creative practice.

ACADEMIC & RESEARCH APPOINTMENTS

2023 – 2025 **Performance Lab Fellow**, Royal Central School of Speech and Drama
Practice-based research and knowledge exchange around digital performance, motion capture and virtual and mixed-reality theatre. Wrote successful funding bids and led two XR Network+ (EPSRC) funded research projects. Advised colleagues, external companies and visiting artists on motion capture and XR technology. Managed motion capture studio and taught masterclasses in motion capture performance. Organized KE activities including symposium on mocap performance and pedagogy and new artist residency programme. Research publications and presentations at academic and industry conferences.

2021 – 2023 **Research Fellow, XR Stories**, University of York
Practice-based research on immersive storytelling, XR for theatre and live performance, motion capture performance techniques, and VR storytelling for climate communication. Advised university colleagues, regional creatives and SMEs on performance capture and immersive storytelling; taught workshops on motion capture; supervised interns and supported PG researchers. Presented research at academic conferences and organized and chaired panels at XR and creative industry conferences. Contributed to policy briefings.

2017 – 2021 **Instructor**, Department of Computer Science, New York University
Taught core undergraduate introductory programming course (Python); designed and taught new upper-level course on VR development with Unity game engine. Developed curricula, assessments and marking rubrics; hired and supervised student teaching assistants.

2020 **Instructor**, Tisch School of the Arts, New York University
Designed and co-taught module on VR performance for Integrative Technology Lab, an interdepartmental course in technology and performance.

2017 **Project Manager and Performance Director**, Future Reality Lab, NYU
Creative direction and production management for a prototype of live mixed-reality theatre: actors and audience in co-located room scale VR. Convened interdisciplinary research group and led successful funding application. Led script development, production meetings, rehearsals and production, performed at Future of Storytelling Festival. Wrote and presented research paper at SIGGRAPH conference.

2016 – 2017 **Artist in Residence,** Integrated Digital Media Program, NYU Tandon School of Engineering
Creative direction for live theatre production in multi-user virtual reality, presented at Tribeca International Film Festival. Led interdisciplinary collaboration of students and theatre professionals.

RESEARCH LEADERSHIP AND FUNDING

Theatre Virtually Everywhere: A New Framework for Virtual Rehearsal – XR Networks+/EPSRC **£74,996.69**
Principal Investigator. Research and development of XR tools for the theatrical rehearsals. Collaboration with Royal Shakespeare Company and international technology company partners.

Performing Non-Human Characters in Live Mixed-Reality Performance – XR Networks+/EPSRC **£9,983.10**
Co-Investigator. Motion capture performance techniques and real-time animation pipeline for expressive and engaging non-human characters, for live, co-located, mixed reality immersive theatre.

Hybrid Immersive Live Performance – Storyfutures/AHRC **£11,955**
Principal investigator. Prototype hybrid theatre performance with FandCo production company.

Motion Capture Performance Techniques – Screen Industries Growth Network **£7,600**
Principal investigator. Performance techniques for motion capture and avatar performance.

Play ON! -- European Culture Funding Stream Creative Europe
Senior Advisor on Digital Creativity for €2 million cultural project on new forms of immersive storytelling in theatre. Supporting nine European theatre companies to integrate interactive and immersive technologies in their productions.

Avatar Selection for Live Performance in VR – Contract with High Fidelity LLC. **$18,000**
Principal Investigator and Technical director. Practice-based research on how avatar design characteristics impact performer embodiment and expressiveness. Lead author on IEEE conference paper.

Holojam Theatre – NYU University Research Challenge Fund **$14,000**
Project manager. Led funding application, research direction, and production for creative practice research into co-located, mixed-reality immersive theatre performance. Lead author on SIGGRAPH paper.

INDUSTRY EXPERIENCE & TECHNICAL LEADERSHIP

2016 – present **Immersive Media Creator, Producer and Technical Consultant**
Creative direction, UX design, technical production and software development for clients in cultural, heritage, educational and tech innovation sectors. Selected clients: Samsung Accelerator, Royal Caribbean, Scatter, Pollock-Krasner Museum, Staatstheater Nürnberg.

2018 – 2019 **Technical director and Co-producer**, Alive in Plasticland
Produced live performances in social VR. Published best practices guide for VR theatre productions and taught workshops for industry participants in NYC and at SXSW. Designed technical setup and trained tech crew for performances at Venice Film Festival.

2012 – 2015 **Technology Solutions Architect & Lead Developer**, Globalworks
Software architecture and developer team management at a global interactive agency.

2010 – 2012 **Technical Director**, iAmplify
Guided technical strategy and software architecture, and oversaw all technical operations for media publishing platform for small to mid-size digital content producers.

1995 – 2010 **Interactive Technology Consultant**
Technology strategy consulting and software development services for a range of clients including museums, public policy advocacy, entertainment, and e-commerce.

REFEREED PUBLICATIONS

ORCID: 0000-0001-7183-6655

Laibson, K. and **Gochfeld, D.** (2026) Directing AI Performers. *Contemporary Theatre Review*. (in press)

Gallist, N., **Gochfeld, D.**, & Brunmayr, L. (2026). The Adaptation Threshold in Mixed Reality Theater: Cognitive Integration and Narrative Reality. In *Proc. ACM Comput. Graph. Interact. Tech.* (ACM SIGGRAPH Art Papers 2026) DOI: 10.1145/3816087

Laibson, K., **Gochfeld, D.**, & Coulombe, A. (2026). Stage Presence: Design and Testing of a Virtual Rehearsal Room Toolset. In *Proc. ACM Comput. Graph. Interact. Tech.* (SIGGRAPH '26) DOI: 10.1145/3799818.3812091

Laibson, K., **Gochfeld, D.**, & Lokshina, L. (2026). "Everyone notes it differently": The Challenge of Digitizing the Embodied Cognition of Stage Blocking Data. In *Proc. 2026 Conf. on Creativity & Cognition (C&C '26).* DOI: 10.1145/3803784.3807561

Laibson, K., Coulombe, A., Tarr, A., **Gochfeld, D.**, & Yeh, Y. J. (2025). Seeing Yourself on Stage: Multi-Avatar Performance and the Evolution of Self-Monitoring in VR. *Proc. ACM Comput. Graph. Interact. Tech.* (SIGGRAPH Spatial Storytelling '25). DOI: 10.1145/3721244.3742445

Gochfeld, D. and Miletitch, R. (2025) Designing Tools for Live Performance in Social VR. In proceedings: *Journées d'Informatique Théâtrale 2024*. Avignon. HAL: hal-05136964

Lock, D., **Gochfeld, D.**, Kirman, B. (2024). Hybrid Improvisational Theatre: A Thematic Review of the Production Processes. In: Tareq Ahram, Luca Casarotto and Pietro Costa (eds) *Human Interaction and Emerging Technologies* (IHIET 2024). Venice. DOI: 10.54941/ahfe1005494

Gochfeld, D., Coulombe, A., Yeh, Y., Lester, R., Fleming, R.B., Meicher-Buzzi, Z., and Tarr, A. (2022) A Tale of Two Productions: A Christmas Carol On Stage and in VR. *Proc. ACM Comput. Graph. Interact. Tech.* 5(4). (ACM SIGGRAPH Art Papers 2022) DOI: 10.1145/3533612

XR Stories and SIGN (2022) Creative Futures. Written evidence submitted to the House of Lords Communications and Digital Committee. (HL Paper 125)

Coulombe, A., **Gochfeld, D.**, Bradley, B., and Miletitch, R. (2021) Virtual Reality Live Theatre on No Budget: A Model for Independent Theatrical Productions using Open-Source Social VR. *ACM SIGGRAPH 2021 Educators Forum*. DOI: 10.1145/3450549.3464413

Gochfeld, D., Benzing, K., Laibson, K., and Coulombe, A. (2019) Avatar Selection for Live Performance in Virtual Reality: A Case Study. *2019 IEEE Games, Entertainment, Media Conference (GEM).* DOI: 10.1109/gem.2019.8811548

Gochfeld, D., Brenner, C., Layng, K., Herscher, S., DeFanti, C., Olko, M., Shinn, D., Riggs, S., Fernández-Vara, C. and Perlin, K. (2018) Holojam in Wonderland: Immersive Mixed Reality Theatre. *Leonardo* 51(4) DOI: 10.1162/LEON_a_01644

Gochfeld, D. and Molina, J. (2017) To Be With Hamlet. In Weijdom, Joris (Ed.), *Mixed Reality and the Theatre of the Future. Fresh Perspectives on Arts and New Technologies*. Vol 6. IETM - International Network for Contemporary Performing Arts.

KEYNOTES AND CONFERENCE PAPERS

Bodies and Pixels: Reimagining the relationship between Human and More-Than-Human entities in Mixed Reality Performance August 2026
Paper. Theatre and Performance Research Association Conference (TaPRA). London.

Ghosts of Performances Past: Five Years of A Christmas Carol VR May 2026
Keynote. Spatial Storytelling Track, FMX conference, Stuttgart.

Design, Implementation and Performance of a Non-Human and Dynamically Transformable Avatar for Real-time Motion Capture Performance November 2024
Paper. Digital Body Festival Bodies of Knowledge Conference. London.

Shapeshifter: Exploring Gender, Identity and Biological Exuberance through Mixed-reality Performance June 2024
Keynote. Designing Meaningful Social XR Workshop, ACM IMX**,** Stockholm

Practical Performance Techniques for Virtual Reality Theater June 2024
Paper. Performance Studies International. London.

Making The Leap From Stage to VR: A case study with ghosts April 2022
Keynote. Play On Hope Conference (online)

Virtual Realities: Presence, Performance and Story Worlds September 2021
Keynote. Visual Media Conference (online)

Virtual Reality Live Theatre on No Budget August 2021
Paper. SIGGRAPH Educators Forum (online)

Liveness in Virtual Reality June 2020
Paper. RealTime Conference (online)

Avatar Selection for Live Performance in Virtual Reality June 2019
Paper. IEEE Conference on Games, Entertainment and Media. New Haven, CT

Holojam in Wonderland: Immersive Mixed Reality Theatre August 2018
Paper. SIGGRAPH Art Papers track. Vancouver, Canada

KNOWLEDGE EXCHANGE

Turing Way Practitioners Hub Expert in Residence Sept 2024 – March 2025
Alan Turing Institute initiative to advance best practices and ethics for AI and data science in industry. Contributed to case study on ethics around generative AI in the performing arts and screen industries.

Symposium on Motion Capture Performance and Pedagogy September 2024
Organized and ran a public conference bringing together academic researchers and industry professionals, with papers, practical workshops, and an industry panel on motion capture training. For the Royal Central School of Speech and Drama's Centre for Performance, Technology and Equity.

International Broadcasting Conference Accelerator Project June – Sept 2024
Subject matter champion, advising industry-led R&D project "Connecting Live Performances of the Future", prototyping low-latency connections between live performance venues.

Artist Residencies, Royal Central School of Speech and Drama Sept 2023 – Sept 2024
Developed procedures for visiting artists' residencies in the motion capture studio at the Royal Central School of Speech and Drama and provided administrative and technical support for residencies.

XR Stories Funded Projects Sept 2021 – June 2023
Provided mentorship and technical guidance for SMEs and independent artists on funded projects.

Conference Panels Various dates
Organized expert panels on XR and related topics for industry conferences incl. SXSW and Sheffield Docfest.

CONFERENCE PRESENTATIONS AND PANELS

XR Theatre Educators February 2026
Panelist. Performance and XR (PXR) Conference, Toronto (online).

Actor as Engine: Giving Performers Control of Real-Time Technologies November 2025
Panelist. BEYOND Conference, Manchester.

All the World's a Stage: Virtual Performances for Global Multi-platform Theatre June 2025
Panelist. SXSW London.

Who is VR Really For Anyway? October 2024
Presentation. AWE EU, Vienna, AT.

Beyond the 4th Wall December 2023
Panel moderator. Immersive Tech Week, Rotterdam, NL.

Culture and Content in the Metaverse March 2023
Panel moderator. SXSW, Austin, TX.

Virtual Production: A Pathway for Environmental Sustainability in Film and TV? October 2022
Panelist. Beyond Conference, Cardiff

The Non-Fiction Metaverse June 2022
Panelist. Sheffield Docfest Immersive Summit

The Potential of Social Virtual Reality November 2021
Panelist. Aesthetica Short Film Festival

Brave New World: The Future of Theatre & Tech March 2018
Panelist. SXSW, Austin, TX.

Multi-person Experiences October 2017
Panelist. Future of Storytelling Festival, NYC

VR As Theatre: Learning from the Original Immersive Medium September 2017
Jump Into VR Festival, NYC

Directing for VR - Inspiration from Immersive Theatre June 2017
StoryCode NYC

'To Be With Hamlet': Recreating Theatre's Intimacy in VR February 2017
Game Developers Conference. Los Angeles, CA

Opera & VR: Exploring the Potential of Theatrical Experiences November 2016
Panelist. VR Days Europe, Rotterdam

WORKSHOPS AND GUEST LECTURES

Motion Capture Performance Technique January 2024
Masterclass. MA Actor Training and Coaching, Royal Central School of Speech and Drama

AI in Theatre November 2023
Guest Lecture. MSc Artificial Intelligence for the Creative Industries, University of York.

Motion Capture Techniques and Digital Embodiment March 2023
Guest Lecture. MFA in Computational Arts, Goldsmiths University, London

Motion Capture Tools and Workflow Multiple dates
Workshop leader. Creative Media Lab, University of York

5 Open XR Projects July 2020
Workshop moderator. Games For Change festival, NYC (online)

Storytelling in Social VR November 2019
Workshop leader. Newmark Graduate School of Journalism, City University of NY

Towards a Virtual Theatre September 2018
Workshop leader. Digital Cultures: Hybrid Matter Conference (Warsaw)

Producing Live Performance in Virtual Reality March 2019
Workshop leader. SXSW Interactive, Austin, TX

CREATIVE PRACTICE: HONORS AND AWARDS

2026 **Arts Council England National Lottery Project Grant**
£12,000 to conduct R&D on AI tools for live theatre

2025 **Arts Council England National Lottery Project Grant**
£23,000 to develop *Shapeshifter*, a live, location-based VR performance

2022 **XRMust Awards: Winner, XR Event of the Year**
OnBoardXR VR theatre festival (Co-Producer)

2022 **Raindance Immersive: Honorable Mention, Discovery Award: Best Debut**
Offrail VR performance (Co-Director)

2018 **Emmy Award: Winner, Outstanding New Approaches: Documentary**
Zero Days VR (as software developer/animator)

2017 **Future of Storytelling Prize Finalist for People's Choice Award**
Holojam in Wonderland mixed reality performance (Director)

CREATIVE PRACTICE OUTPUTS

2025 **Doctor Faustus** (live mixed-reality theatre) **-** *Director*
Commissioned by Staatstheater Nürnberg. Nuremberg, Germany.

2023-2025 **A Christmas Carol VR** (live VR theatre) **-** *Director*
Official Selection: Raindance Immersive festival (2025)

2022 **OffRail** (live VR immersive comedy) **-** *Co-Director*
Official Selection: Raindance Immersive festival (Honorable Mention: Best Debut)
Official Selection: Festival of International Virtual and Augmented Reality Stories (FIVARS) (Winner for Outstanding Performance: Ari Tarr)

2021 – 2022 **Mrs Nemo** (live VR musical theatre) - *Director*
Festival of International Virtual and Augmented Reality Stories (FIVARS), OnBoardXR virtual theatre festival, and SAMIS Conference (York, UK)

2020 – 2021 **Jettison** (live VR theatre) - *Director*
HERE Festival and OnBoardXR virtual theatre festival
Nominated: Producer's Guild of America Innovation Award

2019 **Loveseat** (live hybrid VR/in-person theatre) - *Supervising Technical Director*
Official Selection: Venice Biennale Cinema

2018 - 2019 **Alive in Plasticland** (live VR improv) - *Producer, Technical Director*
Performance at IEEE GEM conference, New Haven
Workshop and performances in social VR (in the High Fidelity platform)

2017 - 2018 **Zero Days VR** (VR Documentary) - *Unity Developer, Animator*
Winner: Emmy Award (Outstanding New Approaches: Documentary. 2018)
Unity Vision VR/AR Summit (**Winner:** Best Cinematic VR, Narrative Achievement)
Official Selection: Sundance Film Festival New Frontiers (2017)

2017 **Holojam in Wonderland** (live mixed-reality theatre) - *Director, Production Manager*
Official Selection: Future of Storytelling Festival, NYC

2016 - 2017 **To Be With Hamlet** (live VR theatre) - *Director*
Tribeca Film Festival VR Arcade (2017), VR Days Europe (Amsterdam), Exploring Future Reality (NYC Media Lab and Viacom NEXT)

2016 **Name Tag** (Street/Field Game) **-** *Game Designer*
Come Out and Play Festival, NYC

2016 **The Accountant** (360 Video) **-** *Director, Writer*
Google X-Story Showcase, NYU; and ITP Spring Show, NYU

2015 - 2016 **Demolition Library** (VR Experience) **-** *Designer and Developer*
VR in Immersive Storytelling Showcase, Daily News Innovation Lab

2014 - 2015 **Play Space** (Interactive Musical Installation) **-** *Co-Creator*
Tribeca Film Festival Interactive Playground (2015)

PROFESSIONAL SERVICE

- **Reviewer** for Convergence Journal
- **Appointment panel** for Creative Technologist positions, for Centre for Performance, Technology and Equity at Royal Central School of Speech and Drama
- **Funding application review panel**, XR Stories project grants
- **Mentor** for New Inc. creative technology accelerator program, New Museum, NYC

QUALIFICATIONS

2016 **MPS (Master of Professional Studies)**, **Interactive Telecommunications Program**
Tisch School of the Arts, New York University. Practice-based thesis topic: Comedy in Virtual Reality.

1994 **Certificate, Theatre Creation and Performance**
École Internationale de Théâtre Jacques Lecoq. Paris, France

1991 **B.A. Computer Science (High Honors) and Theatre**, Oberlin College, Oberlin OH