

SOUNAK GHOSH

Senior Technical XR Designer

Astoria, NY · Open to relocation, remote, and hybrid

sounaktheghosh@gmail.com · hellosounak.com · linkedin.com/in/beingsounak

Summary

Senior Technical XR Designer with 7+ years in XR and 3D, including 5 years hands-on in Unity and 3 in Unreal, building immersive products for training, education, and healthcare. I've shipped 40+ VR training simulations and designed AI production workflows that cut production costs by 28.6%. My work focuses on how people interact with the physical world through headsets and smart glasses: interaction systems, neurofeedback and biosignal-driven experiences, and AI-assisted pipelines that scale 3D/XR content. Recent recognition includes first place at XRCC 2026 for a smart-glasses sales-intelligence system, and first place at MIT Reality Hack 2026's Community Hack, where I also judged the Meta track.

Core Skills

- **XR Design & Prototyping:** Unity (C#), Unreal Engine (Blueprints), Meta Quest 3 / passthrough mixed reality, smart-glasses interaction, spatial UI (diegetic and non-diegetic), rapid prototyping, interaction design
- **Applied AI & Automation:** AI workflow and pipeline design for 3D/XR content production, multi-stage LLM agent workflows, computer-vision inference in XR, camera-to-API integration (WebSockets), generative AI tools
- **UX & Research:** user-centered design, systems thinking, user testing and feedback programs, SDK/tool usability, working with SMEs and instructional designers
- **3D & Technical Art:** modeling, UVs, texturing, rigging, animation, shaders, materials, particle systems, LODs and draw-call optimization, 3D pipeline setup
- **Video & Production:** editing, compositing, virtual production, motion-control camera work

Experience

Senior Technical XR Designer — Transfr Inc.

New York, NY · July 2022 – Present

- Shipped 40+ VR training simulations for skilled trades and career exploration, working with engineers, technical artists, instructional designers, and subject-matter experts to turn real-world job tasks into accurate, engaging VR interactions.

- Designed AI-assisted production workflows that cut production costs by 28.6% and saved 2,400 hours of production time across 15 simulations in 2025.
- Run user testing and feedback for Transfr's proprietary simulation SDK and authoring tools, and turn the findings into tooling and workflow improvements.
- Explore designs and build Unity prototypes that turn hands-on physical skills into intuitive VR interactions.

3D Designer (Unreal Engine) — CREATE Lab, NYU Steinhardt

New York, NY · Jan 2021 – May 2022

- Built 3D assets, animations, and interactions for **Looking Inside Cells**, a Verizon-funded VR simulation that teaches cell biology to middle schoolers ([on Steam](#)).
- Built meshes, materials, shaders, particle systems, and Blueprint gameplay and level-design tools in Unreal.
- Optimized VR performance through polygon and texture budgets, material instancing, and render-pipeline tuning.
- Iterated designs with researchers and teachers. Co-authored two 2022 papers on designing immersive and collaborative VR science learning.

3D Artist — The Glimpse Group

New York, NY · Nov 2019 – Apr 2020

- Built 3D environments, assets, and avatars for enterprise VR/AR apps, including a hospital-cleaning training app for NYU Langone (Adept Reality) and a multi-user VR platform for remote collaboration and therapy (Foretell Reality / XRHealth).
- Set up a 3D production pipeline for VR (modeling, UVs, texturing, rigging, animation) and optimized assets with LODs, instancing, and custom shaders.
- Designed diegetic and non-diegetic VR interfaces and applied UX strategies across XR products.

Earlier Experience

- **3D Artist / Story Writer — Avolve Innovations** (Dec 2017 – Feb 2019): designed levels, concepts, and 3D assets for *Scuba's Ocean Odyssey*, a VR game about ocean plastic pollution. Produced trailers and pitched at conferences to support its Kickstarter.
- **Motion Control Operator — Donatello Arm** (Nov 2018 – Aug 2019): operated a motion-control camera rig for advertising shoots, handled lighting and green screens, and trained new operators.
- **Floor Instructor — VR World NYC** (Aug–Nov 2019) · **Freelance 3D Artist — Konzept VR** (2018) · **Freelance Animator — Tell Tales Cinema, Master's Dream** (2016–2017)

Selected Projects

- **Lookwise (2026):** Real-time sales intelligence for smart glasses. It recognizes products, builds a buyer profile from the conversation, and quietly coaches the salesperson through a staged AI agent workflow (intake → needs discovery → matching → objection handling → close → summary). **1st Place, XRCC 2026, "Visual Sales: Sell Smarter" track (Berlin).**
- **Between Us (2026):** Neurofeedback-driven mixed reality experience. **1st Place, MIT Reality Hack 2026 Community Hack.**
- **Breath Detection VR (open source):** Unity algorithm that detects inhale, exhale, and breath-hold from headset motion, for breath-driven and wellness VR. [GitHub](#)
- **Inner Light:** Embodied VR meditation that uses real-time EEG to visualize the user's body. Exhibited at the Museum of Contemporary Digital Art (MoCDA) Digital Summer Show 2022, and the basis of a master's thesis on neurofeedback in VR.

Awards, Judging & Recognition

- **1st Place, XRCC 2026, "Visual Sales: Sell Smarter" track (Berlin), for Lookwise**
- **1st Place, MIT Reality Hack 2026, Community Hack, for Between Us**
- **Judge, MIT Reality Hack 2026, Meta Track**
- Exhibited *Inner Light*, MoCDA Digital Summer Show (2022)
- Most Forward-Thinking Pitch, Human Performance Hackathon (2022)
- Finalist, Cornell Health Hack (2022)
- Best Research Application, XR Brain Jam, Games for Change Festival (2021), plus a public talk at G4C 2021
- Children's Favorite Game, BCI Game Jam, University of Calgary (2021)

Publications

- Co-author, "Designing Effective Immersive VR Learning Experiences" (2022). [DOI](#)
- Co-author, "Designing Effective Playful Collaborative Science Learning in VR" (2022). [DOI](#)

Education

- **MSc, Integrated Digital Media, NYU Tandon School of Engineering (2020–2022)**
- **BFA, Animation & Visual Effects, Savannah College of Art and Design (2013–2017)**
- Summer School, Animation & Interactive Technology, Gobelins, l'école de l'image, Paris (2017)

Languages: English (native), Bengali (native), Hindi (professional), French (elementary)