URJA DEDAKIA

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EDUCATION

MSc Design and Digital Media Sep 2025– Aug 2026
University of Edinburgh · Edinburgh, UK

Bachelor Of Technology (Electronics and Communication Engineering) Jul 2016 – Sep 2020
Guru Gobind Singh Indraprastha University · New Delhi, India

SKILLS

Technical: Unity · Unreal Engine · TouchDesigner · Blender · MediaPipe · After Effects · Procreate · Photoshop · Illustrator · Audacity · Figma

Languages: Hindi · English · French (Intermediate)

PROJECTS

Becoming the Artist

Interactive Installation · 2026

Dissertation Project · Solo · 3 months

Concept & Research: Embodied Participation as a Mode of Engaging with Historical Art. Grounded in Impressionist theories of perception and embodied cognition. Central research question examined whether historical art can be encountered through embodied participation rather than passive observation — using Van Gogh's paintings, preparatory sketches, and letters to Theo as experiential material.

System Architecture: Built the interactive environment in Unity across two simultaneous display outputs. Developed a real-time gesture recognition pipeline using Python and MediaPipe, detecting open palm, fist, wave, and point gestures — each mapped to distinct scene states and interaction triggers. Physically installed and calibrated a dual-projector setup, external webcam, and spatial audio system, managing display alignment, webcam field-of-view constraints, and ambient lighting conditions to maintain reliable hand tracking.

Technical Development: Authored two custom Unity shaders: a sketch reveal shader treating Van Gogh's preparatory drawing as a hidden layer beneath a blank canvas — visitor hand movement determining where original ink lines emerged; and an impasto painting shader sampling colour values directly from the source painting at the corresponding hand position, reconstructing the original work through visitor gesture. Built an original 3D interpretive environment — a spatial reconstruction of Van Gogh's Wheatfield with Cypress — as an exploration of perceptual experience rather than visual reproduction.

Iteration: Conducted three structured user testing rounds. Round 1 identified interaction fatigue and absence of narrative context — responded by restructuring interaction rhythm to cycle between active gesture, environmental response, and passive observation, and integrating Van Gogh's letters to Theo as contextual anchors between scenes. Round 3 evaluated the full installation (8–10 min runtime) across narrative comprehension, emotional response, and gesture-environment legibility.

Outcomes: Participants independently identified letters as Van Gogh's correspondence, understood scene progression as journey through his artistic process, and described painting and sketching interactions as meaningfully distinct from viewing art. Documented emotional responses included calm, immersion, grounding, and unexpected emotional resonance.

Alice's Adventures 2D+3D Narrative Side-Scrolling Platformer Game· 2026

Team of 3 · 2.5 months

Level Design: Designed Level 1 as an intentionally desaturated, corrupted forest environment — using visual language (drained colour, environmental distortion, unnatural behaviour) to communicate Wonderland's broken state before any explicit narrative instruction, structuring the level as both a mechanical introduction and an act of environmental storytelling.

Systems Design: Designed the skill and combat system across all three levels. Level 1 introduces three foundational player abilities: Double Jump (Twixstep), Climbing (Swiftwing), and Frost Elixir — a potion-based freeze mechanic granted by the Mad Hatter, designed as a required progression mechanic for the level boss rather than an optional collectible, ensuring skill acquisition carried narrative and mechanical weight simultaneously.

Narrative & Cinematic Design: Authored all in-game dialogue in Victorian register. Scripted a 5-scene opening cinematic establishing tone, stakes, and player motivation. Designed the closing Nightbloom Tree restoration sequence — particle VFX triggered per recovered Fallen Piece, reinforcing that progression represents world repair rather than level completion.

Iteration: Midway user testing (8–10 players) identified dialogue pacing issues, unclear skill acquisition feedback, and insufficient boss tension before level transition. Responded by shortening dialogue, implementing skill feedback states, introducing a mandatory boss confrontation with player respawn system, and overhauling the visual layer with parallax depth.

Outcomes: Players responded positively to Victorian dialogue register, original main theme selection, and hand-drawn art style.

12 Feet Deep Interactive Experience · 2025

Solo · 2 months

Concept: An autobiographical interactive short story translating a personal childhood near-drowning experience into a non-linear, explorable digital narrative — reframing the source event through childhood imagination and curiosity, using metaphor, ambient sound design, and player-controlled progression to reconstruct emotional memory.

Build: Designed and developed 9 scenes in Unity structured as a psychological progression: sudden submersion opens the experience, followed by scenes shifting the underwater world into something exploratory — sea creatures introducing wonder before fear, monster sounds signalling the slow onset of danger, culminating in a light-navigation sequence leading to the surface. Interaction distributed by scene context: mouse clicks for environmental elements, spacebar for CPR and swimming acceleration, arrow keys for vertical movement. Three bubbles in dark environments represent persistent subconscious memory fragments — clicking each opens a short episodic sequence rendering a fragment of the original experience through abstract visual storytelling.

Testing: Tested across 6–8 participants, using feedback to refine scene pacing, interaction clarity, and emotional legibility of the non-linear memory structure.

EXPERIENCE

Visual Designer · Freelance · Jan 2023 – Jan 2025 · New Delhi

Created illustrations, logos, and branding packages for clients across marketing and advertising

Developed visual identities, banners, and event collateral for businesses and community organisations.

Front-End Developer · Innovative Application Consultants · Jan 2023 – Mar 2024 · New Delhi

Developed responsive, interactive web interfaces using HTML, integrating graphics, audio and video to enhance user engagement.Collaborated to translate visual concepts into functional experiences, testing and refining interfaces across browsers and devices.

Software Engineer · Cariano Next Telecom Pvt Ltd · Jan 2021 – Dec 2022 · New Delhi

Collaborated with product, design and cross-functional teams to develop and deliver digital solutions.

Analysed software requirements, explored technical feasibility and translated ideas into functional solutions.