

EDUCATION

Indraprastha Institute of Information Technology Delhi (IIIT-Delhi)

New Delhi, India

*B.Tech in Computer Science and Social Science with **Minor in Human Centred Design***

Bachelor's Thesis Project: Exploring Interaction Design Space of Tangible Storytelling for Indian Vernacular Artefacts

WORK EXPERIENCE

AdiNex.AI, Startup | Product Engineer

August'25 - Current

- Contributed to end-to-end delivery of AI/ML products, converting dicussions between business and engineering teams into AI Models. Translating experimentation to production.
- Technical execution including GitHub workflows, model testing pipelines, and cloud deployment using **Azure**.
- Translated airline and food-tech domain requirements into technical roadmaps, sprint deliverables, and engineering timelines.

Creative Interfaces Lab, IIIT Delhi | Undergraduate Researcher

May'23 - Current

- Led the development of an **Interactive Tangible System** utilizing LLMs as a storytelling agent for Non-Western contexts.
- Designed and prototyped Mixed Reality interfaces, conducting user tests to evaluate interaction effectiveness and engagement.

IWay Plus, IIT Delhi | UX Researcher

Sep'24 - Dec'24

- Translated user research into accessible design solutions for an **LLM-based navigation and accessibility system**.
- Analyzed patient flow for **1,500+ daily outpatients** at AIIMS New Delhi to identify bottlenecks in registration and consultation.
- Mapped journeys for **100+ clinicians**, designing service interventions to reduce waiting times by **20–30%** and improve throughput.

IMXD Lab, IDC, IIT Bombay | Research Intern

May'24 - July'24

- Developed a **VR experience in Unity** for translating contemporary art into immersive media formats based on primary research.
- Created a **Rhino/Grasshopper** pipeline to generate G-code for 4D printing, enabling precise control over object transformation.
- Co-authored research on **perceived affordances** in 4D printed objects, integrating additive manufacturing with HCI principles.

PUBLICATIONS

- [1] **Aditya Padmagirwar** 2026 – Playing, Watching, Telling: Design Research into Digital Reinterpretation of Indian Vernacular Artefacts Conference Proceedings of **ACM Creativity and Cognition'26** DOI
- [2] Saumik S., **Aditya Padmagirwar**, Shivoy A., Anmol S. 2024 – KaavadBits: Exploring Branching Narratives for Tangible Interactive Storytelling Through a Kaavad-inspired Diegetic Installation. Conference Proceedings of **ACM TEI'24** | [DOI > 10.1145/3623509.3635251](https://doi.org/10.1145/3623509.3635251)
- [3] Saumik S., **Aditya Padmagirwar**, Shivoy A., Anmol S. 2024 – KaavadBits: An Interactive Art Installation for a New Narrative Experience Conference Proceedings of **Arts Track at IndiaHCI 2023** | ([LINK](#))(*Initially supposed to be just a presentation in the Arts Track at IndiaHCI later got published. Won the Special Mention Award for the Presentation)

PROJECTS

Studying Behaviour in Gacha Games — Course Project

[Github](#)

- Designed a controlled behavioral experiment to analyze **loss aversion** and **sunk cost effects** in gacha-style risk environments.
- Simulated mechanics across 3 conditions to test the impact of **pity system disclosure** and outcome framing.
- Applied **Prospect Theory** to bridge theoretical behavioral economics with observed player data and emotional drivers.
- Conducted thematic analysis on post-task surveys to identify drivers such as **regret, satisfaction, and fairness**.

Design Affordances in 4D Printed Objects — Internship Project

- Built an automated **Rhino and Grasshopper** pipeline to convert 3D designs into G-code for 4D printing.
- Conducted user studies with **40+ participants** to evaluate perceived affordances and signifiers of shape-changing objects.
- Analyzed qualitative and quantitative feedback to identify usability gaps in **non-static physical interactions**.
- Co-authored a research paper proposing **5+ actionable guidelines** for intuitive interaction with 4D printed interfaces.

Navigating Indoor Spaces for the BVI — Independent Project

- Designed a smartphone-based indoor navigation system to support independence for **blind and visually impaired (BVI)** users.
- Evaluated **10+ accessibility tools** through interviews and competitive analysis to identify and address unmet needs.
- Developed non-visual navigation using **tactile feedback, audio cues**, and a conversational **NLP-based chatbot**.
- Planned usability protocols focused on reducing **cognitive load** and improving spatial awareness across global localizations.

RELEVANT COURSEWORK

Affective Computing, Human-Centered Interactive Systems, Data Structures and Algorithms, Analysis and Design of Algorithms, Object-Oriented Programming, Neuroscience of Decision Making, Attention and Perception, Behavioral Economics, Research Methods in Social Sciences and Design, Enhancement Technologies and the Body, Computation for Medicine, Ethics in AI, Image Screen and Interfaces, Philosophy of Technology, Music Machine Mathematics, User Experience of Extended Reality, Design Research Methodology, Design of AI Driven Products

SKILLS

Technical Skills	Design Thinking, User Research and Testing, Study Design, Data Analysis, Rapid Design and Prototyping, Programming
Programming Languages	HTML/CSS, Python, C/C++, SQL, Processing (P5.js), C#, R, Otree, L ^A T _E X
Tools	Unity, Figma/Adobe XD, Arduino IDE, Rhino Grasshopper, Linux/Unix Shell, Git Workflow, Touch Designer
Libraries	Rhino3dm, Rhinoscriptsyntax, ARKit, pandas, NumPy, Matplotlib, 3js, Scikit, PsychoPy

HONORS & ACHIEVEMENTS

- **AIR 5** – NID M.Des DAT Mains, New Media Design (Score: 62.53/100), 2026

ACADEMIC SERVICE

- Student Volunteer – IndiaHCI 2024 and IndiaHCI 2025

Last updated: July 11, 2026