Akshansh Pareek

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Education

Delhi Technological University (DTU) — New Delhi, Delhi, India
Bachelors of Design — *Aug. 2021 – May 2025*

- First Class with Distinction. CGPA 8.4/10.0
- Thesis: *BHED-BHAV: Measuring Regional and Occupational Bias in Large Language Models* (Grade: A+)

Research & Professional Experience

Research Assistant/Collaborator — Aug. 2025 – Present
University Of Cambridge — *Remote*

- Research Lead: Study on institutional and geographic bias in academic publishing; scoped research questions, defined hypotheses, and aligned deliverables with lab goals and ethics requirements.
- Designing controlled experiments by altering author affiliations to compare treatment of submissions from developing vs. developed countries
- Under the supervision of Prof. Alan Balckwell

Research Collaborator — Oct. 2024 – May 2025
MIT Media Lab — *Remote*

- Co-authored an empirical study with Hope Schroeder (MIT PhD) and Dr. Solon Barocas (Microsoft Research) analyzing all FAccT positionality statements from 2018–2024 [C.1,].
- Examined what identity aspects researchers disclose and how often they connect these disclosures to methodological impact.
- Identified key risks: shallow identity disclosure without engagement, limited reflection on industry affiliation, and cases where identity was used to justify methodological choices.
- Contributed to recommendations to strengthen reflexive practice and improve reporting standards in fairness and transparency research.

Research Assistant — Aug. 2024 – Sept. 2024
University of Bristol — *Remote*

- Reviewed and synthesized literature on narrative generation, NPC behavior, player engagement, coherence, memory, and technical constraints in LLM-powered game agents.
- Identified key risks — psychological effects on players, and unsafe or inappropriate AI NPC outputs — underscoring the need for stronger moderation frameworks.
- Co-authored a R&D report and presented recommendations to the project partners. Supervisor Dr Richard Cole

Research Assistant — Feb. 2024 – May 2024
University of Glasgow — *Remote*

- Built Excel-based multiplayer RPG prototypes with interactive macros/forms to test lightweight, accessible multi-agent interactions and rapid balancing.
- Researched early image-to-video generation tools with a focus on technical pipelines (frame interpolation, motion estimation, temporal consistency) and constraints for deployment.

Research Assistant — Sept. 2023 – June 2024
University of Manitoba (Department of Computer Science) — *Remote*

- Developed a 3D virtual gallery (Spot Virtual) to exhibit interior design student work and organized an online opening event.
- Collected and analyzed participant interviews, visitor surveys, and curator feedback to study engagement and communication
- Found positive impact on social interaction, accessibility, and flexibility of exhibitions. Paper accepted at International Journal of Architectural Computing. [R.2]
- Supervised by Prof. Celine Latulipe.

HCI Research Intern Sept. 2023 – Jan. 2024

Concordia University *Remote*

- Conducted a focused literature review on generative AI in interaction design, covering LLM-assisted workflows, visual generation tools
- Planned and ran usability tests for the Edgy AI Chabot; synthesized task analytics and qualitative feedback to refine conversation flows, tone, and error-recovery patterns.

UX Research Intern May 2023 – July 2023

Indian Institute of Technology Guwahati *Guwahati (Assam), India*

- Conducted research on product design methodologies in the medical sector and analyzed market trends.
- Co-developed a medical product development workshop manual covering design and marketing best practices for entrepreneurs in this sector.
- Supervised by Dr. Debayan Dhar and Dr. Neelarnab Dutta

TEACHING EXPERIENCE

Instructor and Mentor April. 2024 – Nov. 2025

Divergent Classes *Delhi, India*

- Mentored students for competitive design exams (UCEED, NID, NIFT), covering design aptitude, assessment, and design thinking. Mentored over 150+ students.
- Conducted classes and provided personalized feedback to improve creative problem-solving and design skills.
- Guided students in portfolio development and exam strategies to improve admission outcomes.

PROJECTS

Fin Equity: Participatory Algorithm Auditing for Microfinance

- Designed and deployed accessible platform enabling SHG members and handloom workers to identify and document bias in microfinance lending algorithms.
- Conducted field testing with 50+ SHG members and handloom workers; validated platform usability and bias detection accuracy.
- Potential reach: 78 million borrowers; creates data-driven social justice infrastructure for algorithmic accountability in informal finance sector.

Svabhāva Reflective Agency System

- Co-developed pluralistic framework operationalizing cultural and decolonial ethics into six actionable AI self-reflection principles.
- Designed mechanisms (multi-lens interpretation, role-adaptive prompts, data sovereignty) addressing documented 25–45% error disparities for marginalized group.
- Contributes to critical gap in epistemic justice and algorithmic fairness literature.

Voice Weave: Dialogue Suppression Detection System

- Designed and implemented end-to-end ML system detecting and predicting voice suppression in multi-party group discussion.
- Trained Random Forest classifier on ~38,000 labeled dialogue turns; achieved high test accuracy using linguistically motivated features (utterance length, speaker diversity, turn frequency).
- Engineered interpretable feature pipeline in conversational mechanics—surfacing how participation imbalance drives suppression risk rather than using opaque embedding.

Samvad AI

- Engineered adaptive tool applying Vedic philosophical principles to analyze conversational flow, structure, and underlying value systems.
- Developed algorithms detecting subtle agreement patterns and meaning-making processes across diverse participant viewpoint
- Applicable to real-world written/spoken dialogues; bridges computational analysis with philosophical hermeneutics for inclusive communication.

PUBLICATIONS

Academic Conference Publications

C.1. Schroeder, H., **Pareek, A**., & Barocas, S., *Disclosure without Engagement: An Empirical Review of Positionality Statements at FAccT." Proceedings of the 2025 ACM Conference on Fairness, Accountability, and Transparency (FAccT '25),* https://doi.org/10.1145/3715275.3732079.

Accepted Papers & Pre-prints

R.1. **Pareek, A**., Goswami, T., & Singh, R., "*Creativity - ERROR 404: Navigating Creativity and Ownership in the Age of AI-Assisted Students"* Manuscript accepted at ICED 2025. [Preprint]

R.2. **Co-author**. " *Exploring the Use of a Web-Based 3D Virtual Environment for Interior Design Work Exhibitions"* Manuscript accepted at International Journal of Architectural Computing [Preprint].

TECHNICAL & Design SKILLS

Programming Languages: Python, R

Machine Learning & Data Science: TensorFlow, Keras, scikit-learn, pandas, NumPy, matplotlib, seaborn, plotly

Design: Interaction Design, Market Research, UX auditing, Usability testing, Data Visualization, UI Design, Wireframing, Information Architecture, System Analysis, 3D Modelling, video editing

Certifications

- Human Computer Interaction and User Experience Design – (Indian Institute of Technology Guwahati)
- Introduction to Transformative AI – (Blue Dot Impact)
- AI Governance – (Blue Dot Impact)
- Deep Learning Specialization– (Coursera)