

Elliott Hedman

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DESIGN LEAD — AI, RESEARCH & HUMAN EXPERIENCE

Ph.D. in Human-Computer Interaction from MIT. I research how people think, design interactions that change behavior, and build the AI systems myself. 1,000+ user interviews. 120+ prototypes tested.

Most AI in education optimizes for engagement. I design for the moment students no longer need the AI.

Selected work at [buildempathy.com/portfolio](#).

THOUGHT LEADERSHIP & RECOGNITION

SXSW EDU — 6x speaker, most-attended individual session (2025)

Featured in: Wired • MIT Press • Popular Mechanics • The74

Patent: Google Glasses Display (US8957916B1, 2014) • Interactive Display (US10080475B2, 2018)

AERA 2018 — paper on emotional weight of feedback in learning

EXPERIENCE

Principal AI UX Researcher & Designer Robots & Pencils November 2025 - Present

Major Research University — AI-Native Student Support Orchestration (*Client confidential*)

Led research, design direction, and prototyping to reimagine how a major research university supports 100,000+ students — shifting from reactive helpdesk to proactive AI orchestration.

- **Identified a critical design misalignment** through user research: <1% of students use existing support channels, redirecting the design thesis from chatbot → behavioral orchestration
- **Designed the interaction and information architecture** for an AI system that monitors, routes, and proactively intervenes across student touchpoints
- **Built working Claude-powered prototypes** to move 20+ stakeholders (academic, product, operations, IT) from debate to decision
- **Designed for behavioral outcomes**, not engagement metrics

Founder & Design Lead mPath Ltd. 2013 - Present

Independent design research and AI experience studio. Research, design, and build AI-powered learning systems from concept through production.

Level Up — AI Writing Tutor | 2024–Present

[buildempathy.com/levelup](#)

- **Designed a multi-agent interaction model** with strict anti-answering constraints — preserving student cognitive effort while delivering Socratic support
- **Designed a behavioral evaluation system** — applying design systems thinking to AI behavior — using LLM-as-judge to detect tone drift, answer-giving, and hallucination across model versions
- **Voice and text interaction design** supporting 8,000+ students, launched as most-attended session at SXSW EDU 2025

Wonder.io — Conversational Reading Platform | 2022–Present

wonder.io

- **Designed a voice-first interaction model** replacing traditional multiple-choice reading flows for neurodivergent and emerging readers
- Students advanced **3 grade levels** across 60,000+ readers — outcomes validated by external assessment
- Partnerships with Boys & Girls Clubs of America and Denver Public Schools

McGraw Hill — ELA Experience Design | 2022–2024

- **Introduced psychophysiological measurement** (EDA sensors) into Title I pilot classrooms to capture real cognitive states — moving beyond self-report and click data
- **Led a 30+ person cross-functional design team**; mentored 3 design researchers and helped define the vision for McGraw Hill's flagship ELA product
- Scaled to **5.2M students**; doubled academic performance in Title I classrooms

The LEGO Group — Innovation Design | 2021–2023

- **Uncovered children's unspoken storytelling impulses** through large-scale contextual inquiry — designed, built, and tested 40+ prototypes across narrative play and early literacy
- Led a 5-person international design team; made high-stakes design cuts to redirect the direction
- New product direction contributed to **20% sales increase**

Curriculum Associates (i-Ready) | 2016–2018

- **Drove 50%+ increase in independent student participation** through classroom-based research and rapid prototyping — design practices that scaled with i-Ready from 3M to 13M+ students
- Introduced design research practices that helped establish a human-centered culture across a 700-person organization

Google Self-Driving Car (Waymo) | 2011–2012

- Conducted naturalistic research on rider experience; designed interaction responses that reduced stress by **80%**
- Worked directly with Sergey Brin to translate behavioral insights into early UX strategy; research influenced multiple Waymo patents

EDUCATION

Ph.D. in Human-Computer Interaction

Massachusetts Institute of Technology • 2014

Dissertation: psychophysiological measurement of cognitive and emotional states in learning contexts

B.S. in Electrical Computer Engineering

University of Colorado, Boulder • 2007

CAPABILITIES

Research: Ethnographic fieldwork, psychophysiological measurement, behavioral analytics, 1,000+ user interviews, 120+ prototypes tested

Design: Interaction design, voice UX, conversational AI design, information architecture, design systems, Figma

AI & Prototyping: Multi-agent systems, LLM evaluation, Claude / OpenAI / Gemini APIs, prompt engineering, RAG

Engineering: TypeScript, React, Vue, Python (FastAPI), Firebase, Node.js, Google Cloud Functions