

Cole Biehle

tbiehle@cs.cmu.edu | colebiehle.github.io | linkedin.com/in/colebiehle | (602) 540-6515

EDUCATION

Carnegie Mellon University

Master of Human-Computer Interaction

Pittsburgh, PA

Aug 2026

- Relevant coursework: Human-AI Interaction, AI Augmented Designer, Advanced Interaction Design, Prototyping Algorithmic Experiences, Programming Interactive Experiences

University of California, San Diego

Bachelor of Science in Cognitive Science, Minor in Computer Science

La Jolla, CA

Jun 2022

EXPERIENCE

UX Research Consultant | Mindswarms

Sep 2022 - Feb 2025 | San Francisco, CA

Clients: Google, Amazon, Microsoft, Nike, American Express

- Google: turned concepts into recommendations adopted by 10+ product teams across Search, YouTube, Pixel, and Lens, cutting Pixel gesture frustration by 25%, lifting Lens accessibility 50%, and shaping the "What people are saying" Search pill.
- Conducted 15+ generative and evaluative studies (usability, interviews, surveys, concept testing) for billion-user products.

Founding Product Designer | Analogical Engines

Aug 2025 - Present | Pittsburgh, PA

- Developed an AI system from research into how R&D teams work, designed around the workflow bottlenecks that surfaced to break their cognitive fixation; won the \$150k grand prize at CMU's McGinnis Venture Competition.
- Built a multi-agent pipeline that runs research end to end: recruiting stakeholders, conducting interviews, and analyzing data.

Product Designer | Zelig

Jun 2023 - Dec 2023 | Beverly Hills, CA

- Defined product-market fit for a GenAI fashion tool through 50+ interviews, 200+ surveys, and analysis of 30+ competitors, shaping a feature framework that improved prototyping efficiency by 40% and supported a \$15M Series A raise.

Teaching Assistant | Carnegie Mellon, HCII - AI Augmented Designer

Jan 2026 - May 2026 | Pittsburgh, PA

- Taught 60+ graduate students to augment the full design process with current LLM and diffusion tools, from research to prototyping, and to judge where AI speeds the work up and where human judgment has to lead.

RESEARCH

Research Assistant | Carnegie Mellon, Kittur Lab (Dr. Niki Kittur & Dr. Nik Martelaro)

Aug 2025 - Present | Pittsburgh, PA

- Ran a deep qualitative study of how R&D professionals work, identifying the cognitive and structural bottlenecks in their ideation workflow and turning them into requirements for new AI-augmentation tools (Toyota Research Institute sponsored).

Research Assistant | UC San Diego, Protolab & HXI (Dr. Steven Dow & Dr. Nadir Weibel)

Sep 2022 - Present | La Jolla, CA

- Designed and built a multi-agent LLM system (React) to scaffold academic writing (in submission to UIST 2026), and ran a 172-participant study on LLM conversational cues in group ideation (Collective Intelligence 2025).
- First-authored a paper on data validation for news platforms (Computation + Journalism 2024), and led an n=200 industry study that proposed a sociotechnical system to enable knowledge-transfer within fleet drivers' daily workflows.

PROJECTS

Team Lead & Product Designer | Carnegie Mellon, Honda 99P Labs (Capstone)

Jan 2026 - Present | Pittsburgh, PA

- Designed and led the team's mixed-methods research (100+ surveys, 50+ interviews, field studies, AI-assisted analysis) to map how drivers communicate intent today and identify where technology could improve their decision-making on the road.
- Translated the findings into speculative multimodal concepts, prototyped them fast in code with AI, and tested them with drivers, then prioritized the designs that minimized cognitive load and fit existing habits.

AI Researcher & UI Designer | Carnegie Mellon, UI for AI (Independent Study)

Aug 2025 - May 2026 | Pittsburgh, PA

- Designed and prototyped new interaction paradigms for AI-native interfaces, testing how people direct, refine, and collaborate with generative models beyond a chat box. Presented research to industry design leaders.

SKILLS

Design Methods: Interaction Design, Visual Design, Information Architecture, Wireframing, Prototyping, Motion Design, Typography, Layout, Accessibility, Design Systems

Prototyping and Design Tools: Figma, Sketch, Keynote, Final Cut Pro, Freeform, Adobe Creative Suite, Apple HIG

Research Methods: Usability Testing, A/B Testing, User Interviews, Survey Design, Competitive Analysis, Thematic Analysis

Programming Languages: JavaScript (React, TypeScript), Python, HTML/CSS, C/C++, Java