

# Annabel Marie Goldman

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(415) 519-2314

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## Education

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**Northwestern University, Evanston, IL**

Expected Jun 2026

M.S. Computer Science, GPA: 4.0

**Northwestern University, Evanston, IL**

Awarded Jun 2025

B.A. Computer Science, GPA: 3.936, Dean's List (all quarters), *Cum Laude*

## Research Interests

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Human-Computer Interaction • Computing Education • Human-Centered AI • Software Engineering • Natural Language Processing • Artificial Intelligence

## Research Experience

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**Master's Thesis: Guardrails for LLMs** (*MU Collective*)

Aug 2025 – Present

- Designing an independent research project on how interface guardrails can encourage trust and improve assessment quality in AI-integrated authoring tools

**Ripplet: AI-Assisted Assessment Authoring** (*Profs. Matthew Kay & Fumeng Yang*) Mar 2025 – Present

- Co-designed and co-implemented Ripplet, an AI-powered, web-based tool built on a teacher-informed conceptual model of assessment design
- Led semi-structured user studies with high school teachers to iteratively design and evaluate our system
- Conducted qualitative and quantitative analyses of screen recordings and survey data
- Co-authored a CHI 2026 submission (under review) and created paper figures with Adobe Illustrator
- Maintaining software and developing additional AI functionalities

**Redesigning CS-1 in the Age of LLMs** (*Prof. Kristian Hammond*)

Sep 2025 – Present

- Redesigning Northwestern University's introductory Python course to reflect how AI coding assistants change what it means to "learn to code"
- Identifying the core concepts students should still master deeply in the era of AI coding assistants and developing teaching strategies to emphasize reasoning over syntax
- Designing assignments and assessments to help students use LLMs productively and responsibly

**Point Taken: Collaborative Game for Civic Discourse** (*Prof. Steve Franconeri*)

Sep 2025 – Present

- Developing a web-based collaborative game to promote critical thinking and civic discourse
- Translating observations of in-person gameplay, including turn-taking and consensus-building, into digital features that replicate those dynamics

**Elizabeth: Conversational Avatar System** (*Prof. Kristian Hammond*)

Jan 2025 – Jul 2025

- Mentored a team of three underclassmen in creating Elizabeth, a real-time conversational avatar that models human pauses, interruptions, and facial cues
- Implemented timing and expression logic in JavaScript using the SitePal API
- Guided and scheduled weekly meetings with team members to walk through tasks such as GitHub setup, SSH access, and debugging in order to help them gain confidence as new researchers

## AI Influencer Project (*Prof. Zach Wise*)

May 2025 – Jun 2025

- Collaborated with journalists to explore how AI-generated influencer personas affect engagement with news content
- Analyzed tone, delivery, and stylistic patterns of leading TikTok creators to develop ten unique AI personas
- Led a four-person development team in creating an n8n pipeline that pulled articles, extracted key insights, generated short-form scripts and videos tailored to each persona, and published them automatically

## Professional Experience

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### Software Engineer, Becise (*Evanston, IL*)

Jun 2025 – Sep 2025

- Contributed to Becise, a startup transforming cognitive science research on data-driven argumentation into an interactive reasoning tool
- Implemented DevOps pipelines, including a full-stack testing framework to accelerate experimentation and feature iteration

### Software Engineer, Crosswordr (*Remote, Vancouver, BC*)

May 2024 – May 2025

- Built and deployed full-stack features for an online crossword platform using React and PostgreSQL
- Designed ads and ran A/B tests for Meta ad campaigns, quadrupling the number of new site visitors
- Identified SEO growth opportunities and translated them into metadata optimizations that improved Crosswordr's performance on Google Search

### Founder, MistakenTales (*San Francisco, CA*)

Jun 2023 – Aug 2023

- Created and launched an alternate reality game (ARG) featuring AI-generated phone call hints
- Built and integrated physical and digital gameplay elements
- Tracked and analyzed player interaction data
- Established MistakenTales Inc. and developed the accompanying website

### Camp Counselor and Product Intern, SF Artifact (*San Francisco, CA*)

Jun 2022 – Aug 2023

- Co-created educational art kits with children, expanding their map-based coloring game into a published activity book about San Francisco
- Collaborated with local bookstores to sell hundreds of activity books

## Publications & Manuscripts

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- Cui, Y., **Goldman, A. M.**, Zhou, J., Liu, X., Shieh, C. M., Yao, J., Cheng, M. L., Kay, M., & Yang, F. (2026). *Ripplet: Authoring Educational Assessments through Multilevel Reusable Interactions with LLMs*. Under review for CHI 2026.

## Technical Skills

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**Languages:** Python, JavaScript, TypeScript, Java, C++, C#, SQL,  $\LaTeX$

**Frameworks:** Next.js, Vue.js, Node.js, Express.js, Flask, GraphQL, Apollo

**Tools:** React, AWS, Docker, Git, Cypress, Figma, Adobe Creative Cloud, Tableau, Overleaf, Unity, n8n

**Databases:** PostgreSQL, MongoDB