

Grad student exploring AI to improve how we learn and work.

EDUCATION

University of California, Santa Barbara (2024/09 – Present)

- Computer Science, MSc with GPA of 3.8/4.0

University of California, Santa Cruz (2021/09 – 2024/06)

- Computer Science, Cum Laude BSc with GPA of 3.9/4.0

PROJECTS (more: <https://jlesner.github.io/projects/>)

“SnipDue: Never Miss Another Deadline” | SB Hacks XI (2025/01)

- Won the "Best Use of GenAI Award" at a hackathon with 221 participants for creating a deadline import tool that works with almost any input schedule format. It uses Claude 3.5 Sonnet and works with Google Calendar, Apple Calendar, Outlook, and any iCal-compatible app.

“Explainable AI Requirements” Study | UCSB (2024/09 – 2024/12)

- Created a user interface for a service to help people improve memory, verify facts, and understand their relationships better. Ran user studies with four groups to test how well AI explanations worked.

“AI Personalized *Interactive Fiction* (AIPIF)” | UCSC (2023/08 – 2024/05)

- Developed an AI storytelling prototype for kids, combining text-to-image, sound, and music generation with LLMs. Added features like emoji-based topic selection, interactive stories, and parental controls. Presented the project at conferences in Spain (ECAI-2024, PAIS-2024).

“State Machine Visualizer (SMV)” | UCSC (2022/09 – 2023/09)

- Created a tool to generate State Machine diagrams from source code. After tests with users submitted findings to ICRA-2025.

PAPERS

- Lesner, J., Murayama, L., Guizar, T., Phunjamaneechot, P., & Shapiro, D. (2024). AI Personalized Interactive Fiction for Young Children. In *Frontiers in Artificial Intelligence and Applications: Vol. 392. ECAI 2024* (pp. 4756-4763). IOS Press. <https://doi.org/10.3233/FAIA241074>
- Lesner, J., Murayama, L., Guizar, T., Phunjamaneechot, P., & Shapiro, D. (2024). A Demonstration of AI Personalized Interactive Fiction for Young Children. In *Frontiers in Artificial Intelligence and Applications: Vol. 392. ECAI 2024* (pp. 4487-4490). IOS Press. <https://doi.org/10.3233/FAIA241036>
- Lesner, J., Elkaim, L., (2025). Automating Visualization of Event-Driven Control Systems. Pending ICRA-2025 peer review.

SKILLS

Technical Skills: Full-Stack Software Development (Python + AI/ML including LLMs/VLMs, ...), Cloud Infrastructure (AWS EC2/S3, Cloudflare), Static Code Analysis, Abstract Syntax Tree Analysis. UNIX/Linux. **Programming Languages:** Python, Haskell, Java, C/C++, SQL, JavaScript, BASH. **Tools & Technologies:** Git/GitHub, Anthropic/OpenAI APIs, Graphviz, LaTeX, PyTorch, TensorFlow. **Research Skills:** User Studies, Prototype Development, Statistical Analysis, Academic Publishing, Conference Presentations. **Project Experience:** Educational Technology, AI Content Generation, Interactive Fiction, Explainable AI (XAI), Automated Visualization. **Soft Skills:** Research Leadership, Academic Writing, Project Management, Educational Design.

