

Felix Gröner

fgroener@asu.edu

Education

Arizona State University, USA

Expected Fall 2026

Ph.D. Human Systems Engineering

Status: Ph.D. candidate, GPA 4.0

Committee: Erin K. Chiou (Advisor), D. Vaughn Becker, Nancy J. Cooke

Dissertation topic: Engineering AI agents for and validating LLM-driven simulations of synthetic participants for Human Factors research

Ulm University, Germany

June 2024

M.Sc. Cognitive Systems

Thesis: The role of explainable artificial intelligence in trust and adherence to AI recommendations

Kiel University, Germany

December 2022

M.A. International Politics and International Law

Thesis: Necessity of adapting International Humanitarian Law to cyber warfare

Kiel University, Germany

December 2020

B.A. Computer Science and Political Science

Thesis: NATO's strategy to deter cyber attacks

Kiel University, Germany

December 2019

B.Sc. Business Informatics

Thesis: Client's influence on the choice of project management technique in software development

Publications

Peer-reviewed

Gröner, F., Verma, A., & Bronowitz, J. (2026). Automatically Generating Interactive Learning Experiences with an LLM Driven Agentic Pipeline. *Proceedings of the Learning Engineering Research Network Convening (LERN 2026): From Insights to Implementation, Learning Engineering in Action*. <https://doi.org/10.59668/2551.25387>

Gröner, F., & Chiou, E. K. (2024). Investigating the impact of user interface designs on expectations about large language models' capabilities. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. <https://doi.org/10.1177/10711813241260399>

Kraus, J. M., Merger, J., **Gröner, F.**, & Pätz, J. (2023). 'Sorry' says the robot: The tendency to anthropomorphize and technology affinity affect trust in repair strategies after error. *Companion of the 2023 ACM/IEEE International Conference on Human-Robot Interaction* (pp. 436-441). <https://doi.org/10.1145/3568294.3580122>

Preprints

Gröner, F., & Chiou, E.K. (2025). *Engineering approaches to improve human-LLM interaction: A scoping literature review*. <https://ssrn.com/abstract=6505859>

Gröner, F., & Becker, D.V. (2026). *Subjective and objective metrics to explain perceptions of original and AI-generated abstract artworks*. <https://ssrn.com/abstract=6482420>

In Preparation

Gröner, F., & Chiou, E.K. (under review). *A comparison of human and LLM-simulated participants in a writing style task*.

Gröner, F., Mancenido, M. V., Kim, N., Summers, E., & Chiou, E. K. (under review). *Increasing transparency of LLM systems does not always improve people's verification behavior and performance: Results from an empirical study of AI-assisted intelligence analysis reporting*.

Gröner, F., Mancenido, M. V., & Chiou, E. K. (in preparation). *Considering expertise as a factor in the design of synthetic test environments for human-AI research*.

Presentations

Gröner, F. & Chiou, E. K. (2026). Caveats of replacing human participants with LLM simulations. *2026 IEEE Conference on Cognitive and Computational Aspects of Situation Management (CogSIMA)*, March 9-12, Tempe, AZ.

Gröner, F. & Chiou, E. K. (2026). Engineering approaches to improve human-LLM interaction (Poster session). *AI Impact Pre-Summit @ ASU*, January 29, Mesa, AZ.

Chiou, E. K., **Gröner, F.**, & Mancenido, M. V. (2025). Increasing transparency of LLM systems does not always improve people's verification behavior and performance: Results from an empirical study of an AI-assisted intelligence reporting task. Abstract submitted to the *69th HFES International Annual Meeting: ASPIRE*, October 13-17, Chicago, IL.

Gröner, F., Mancenido, M. V., & Chiou, E. K. (2024). Multi-source AI Scorecard Table (MAST) for evaluating generative AI in worker-automation team tasks. Project update presented at *Center for Accelerating Operational Efficiency (CAOE) Annual Meeting*, April 8-9, Washington, DC.

Professional Experience

The Polytechnic School, Arizona State University

2026

Graduate Teaching Assistant

Responsibilities: Developing class material for a full-stack development capstone project

ADAPT Lab, Arizona State University

2025

Graduate Research Assistant

Responsibilities: Conceptualizing and conducting pilot studies and literature reviews

Projects:

Semantic leakage is an issue when experimenting with synthetic datasets

- When generating synthetic datasets, prompting context can have undesired side-effects which threaten the validity of findings.
- I used mechanistic interpretability methods to identify the relevant attention heads. Ablating them did not reduce the issue.

People and LLMs learning each other's competencies

- Conducted a pilot study (n = 9) testing how well people and LLMs can assess their own and each other's likelihood of knowing the answer to the next question, given their performance history. Sensitivity to prompt design heavily influenced the initial findings.

Center for Accelerating Operational Efficiency

2023-2025

Graduate Research Assistant

Responsibilities: writing grant application and research proposals, authoring papers

Projects:

Graphical user interfaces for directing expectations or LLMs (GUIDE-LLM)

- \$132,000 awarded
- Developed a custom experimentation platform for human-LLM interaction research. This full-stack web application allows researchers to control the UI/UX of and record behavioral metrics in experiments of human-LLM interaction.
- Composed a set of tasks following the MAST framework to catalog misconceptions about LLM capabilities.

Multisource AI scorecard table (MAST) for evaluating generative AI in worker-automation team tasks

- \$210,000 awarded
- Constructed an experimental setup in which participants (n = 304) solved an intelligence analysis task.
- Analyzed the data from different conditions that varied task difficulty, transparency, and stakes.

The Polytechnic School, Arizona State University

2023

Graduate Teaching Assistant

Responsibilities: Teaching classes and recording videos for Introduction to Programming, Python, Raspberry Pi

Human Factors research group, Ulm University

2022-2023

Undergraduate Research Assistant

Responsibilities: Designing and conducting research studies, project management

Projects:

The role of explainable artificial intelligence (XAI) in trust and adherence to AI recommendations

- Showing people (n = 404) either a global (linear surrogate) or local (LIME) explanation for an AI system's recommendation did not have as large of an effect as the participants' prior self-perceived expertise.

Last updated in April 2026