



# Generative AI for Interactive Systems

Seminar - Summer Semester 2026



UNIVERSITÄT  
DES  
SAARLANDES

# Organizers



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# Basic Information

Time: Thursdays 10:05 am - 11:35 am

Location: E1.3 SR013

In-person only (no virtual)

Website: [Link](#)

# Requirements

You need have taken at least one of the following HCI courses (or an equivalent course at another university):

(A) Human-Computer Interaction (B) Interactive Systems

# Overview

- Read papers
- Present a topic (1 paper)
- Submit questions and participate in discussion
- Write a research proposal on the topic

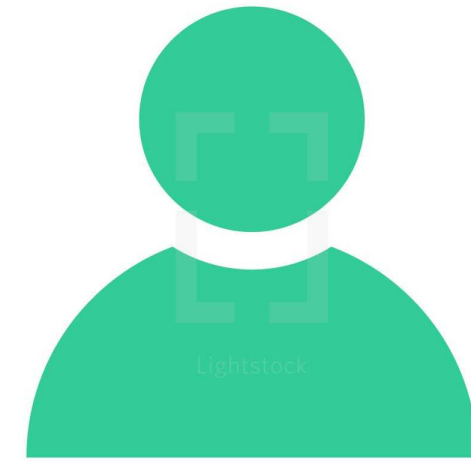
Presentation	Participation	Questions & Moderation	Proposal (Term Paper)	Total
40%	10%	10%	40%	100%

**7 Credit Points**

**In-person presence is mandatory for all sessions**

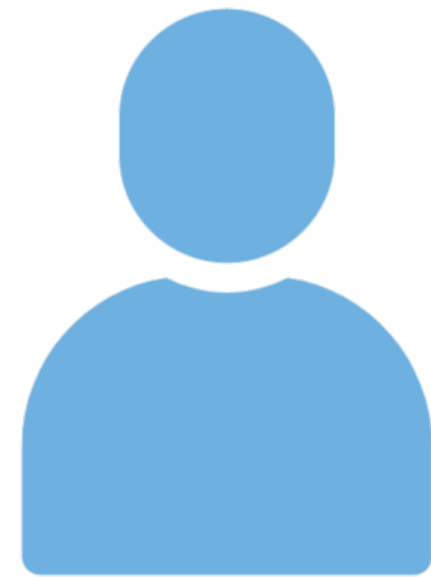
If you skip without a really good reason you will not be able to continue the seminar

# Presentation Format



**Moderators**

Guides discussion



**Presenter**

Present 1 paper  
on a topic



**Others**

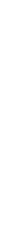
Asks questions  
Participate in discussion

# Seminar Flow

Presenter 1 (20 minutes)



Discussion (25 min)



Presenter 2 (20 minutes)



Discussion (25 min)

# Topics

- 5 topics to choose from
- Each topic comes with 2 papers
- Order of presentations will be decided after topic assignment

Week 2, Apr 23 < You are here	Intro to the course, how to give a good presentation
Apr 27th	Papers assigned
Week 3, Apr 30	How to read a research paper, HCI contributions
Week 4, May 7	(preparation phase)
Week 5, May 14 (HOLIDAY)	(preparation phase)
Week 6, May 21	Presentation
Week 7, May 28	Presentation
Week 8, June 4 (HOLIDAY)	
Week 9, June 11	Presentation
Week 10, June 18	Presentation
Week 11, June 25	Presentation
Week 12, July 2	Writing Session
Week 13, July 9	Writing Session
Week,14, July 16	Backup Slot

# Presenter (20 mins)

- Motivation & Gap (2 mins)
- Core Idea & Contributions (5 min)
- Technical Challenge & Approach (5 min)
- Novel Interactions & Capabilities (5 mins)
- Open Questions & Challenges (3 mins)

# Preparing for the Presentation

- Schedule a meeting with the supervisor of the session 1 week before the presentation
  - Prepare preliminary presentation (not complete rehearsal)
  - We can give feedback on which parts to focus more
  - Supervisor will be assigned during topic assignment
- It is your responsibility to arrange meetings
- We cannot provide last-minute feedback.

# Moderators & Others

- **Before seminar week**

- Everyone submits *at least 2* questions for discussion to [kulzer@cs.uni-saarland.de](mailto:kulzer@cs.uni-saarland.de) (this is graded)
- Deadline: Wednesdays 8am

- **During seminar**

- Each presentation has a moderator
- Organises collected questions into 3-5 themes and prepares for guiding discussion
- After presentation, moderator guides the discussion (this is graded)

# Research Proposal

## 3-4 page report

- Teaser Figure
- Introduction (1 page)
  - Motivation, Gap, Technical Challenge, Approach, Contributions statement
- Related work (1 page)
  - Positioning your work
- Your novel idea (1-2 pages)
  - Core idea, Novel interactions envisioned
  - How it addresses the challenge, How do you expect to realise it using the concepts you learned, Limitations

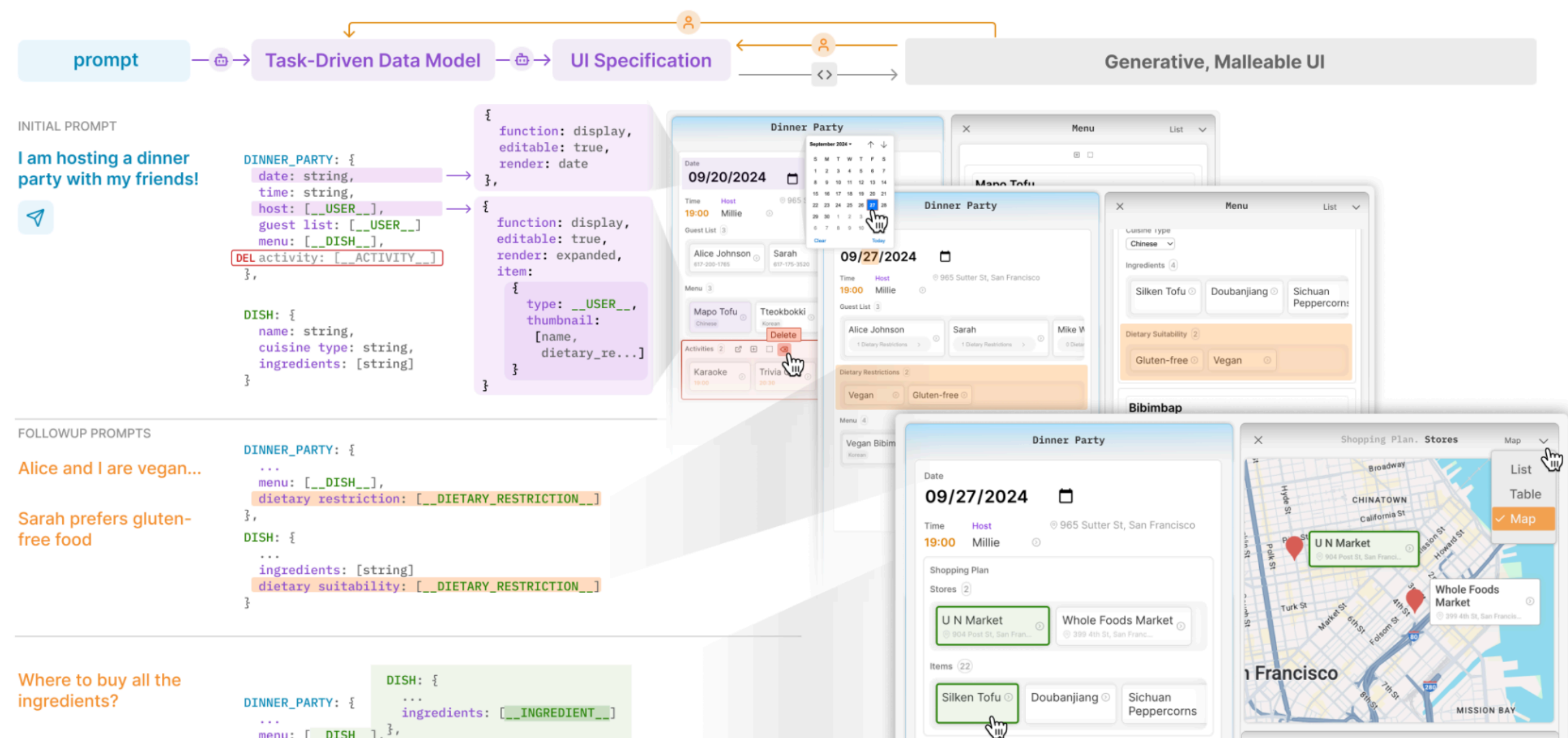
# Writing Sessions

- Give feedback on your research proposal
- A space to get critical feedback on writing research paper in HCI
- Help you get started on your research proposal
- Exact format will be discussed later

The idea is that you get a feeling of writing a research paper, the thought process, what to focus on

# Topics

# Adapting UIs On-the-fly

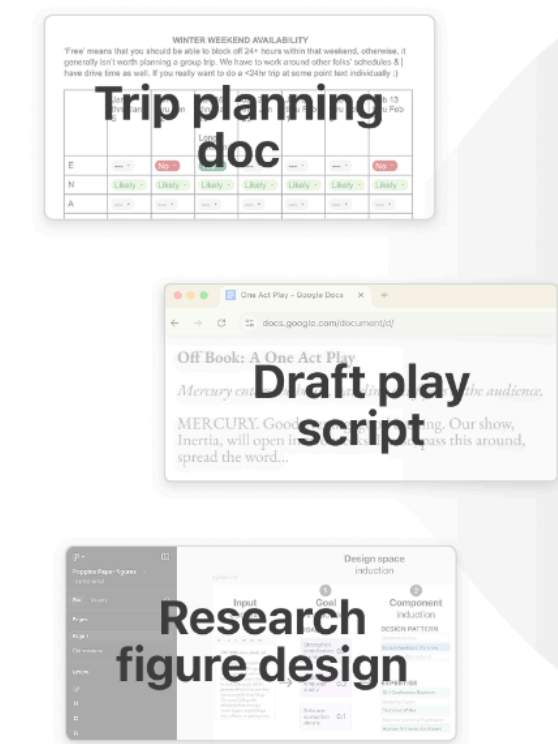


**A**

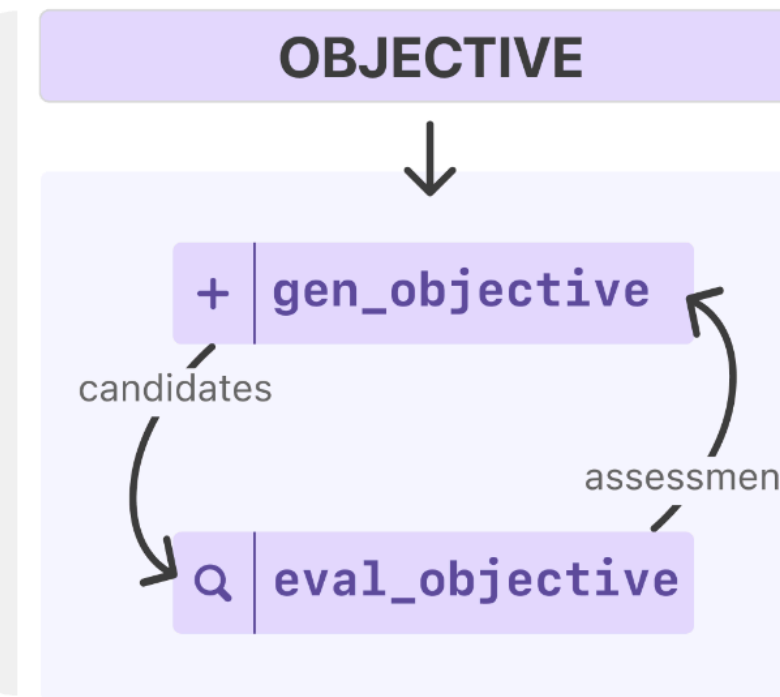
[Generative and Malleable User Interfaces with Generative and Evolving Task-Driven Data Model](#)

Cao et al. CHI 2024

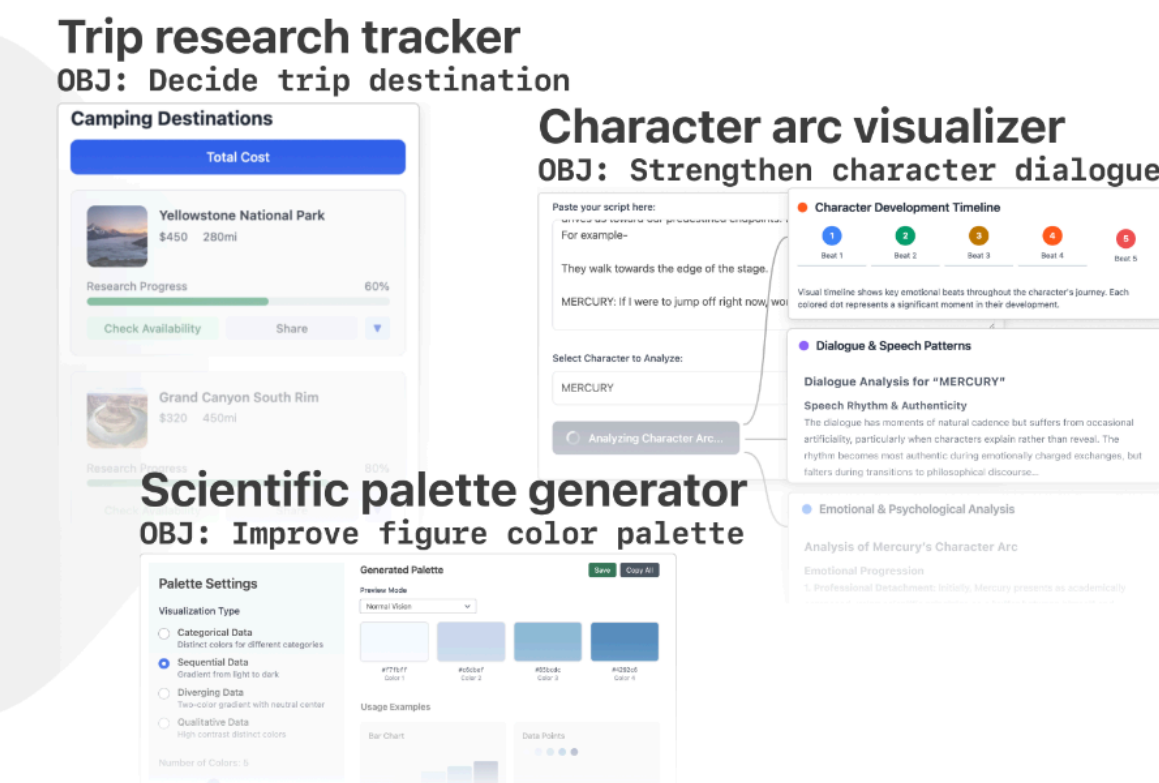
**User Contexts**  
Observed in real time



**Just-In-Time Objectives**  
Induced from context



**Specialized AI Interactions**  
Generated on the fly

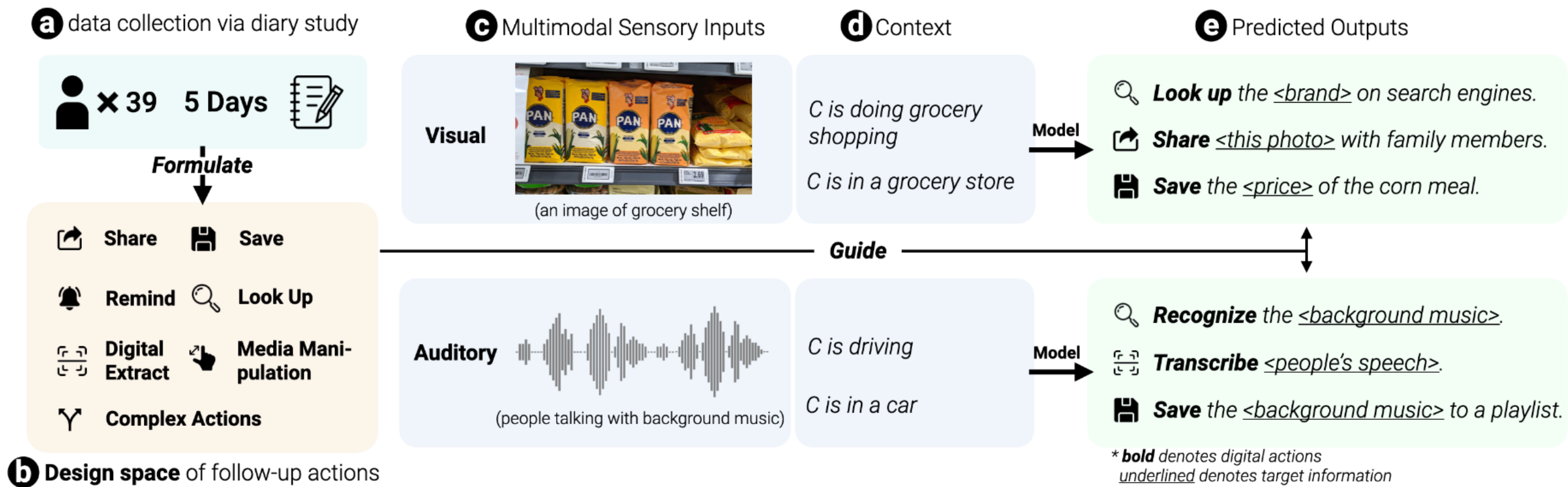


**B**

[Just-In-Time Objectives: A General Approach for Specialized AI Interactions](#)

Lam et al. CHI 2026

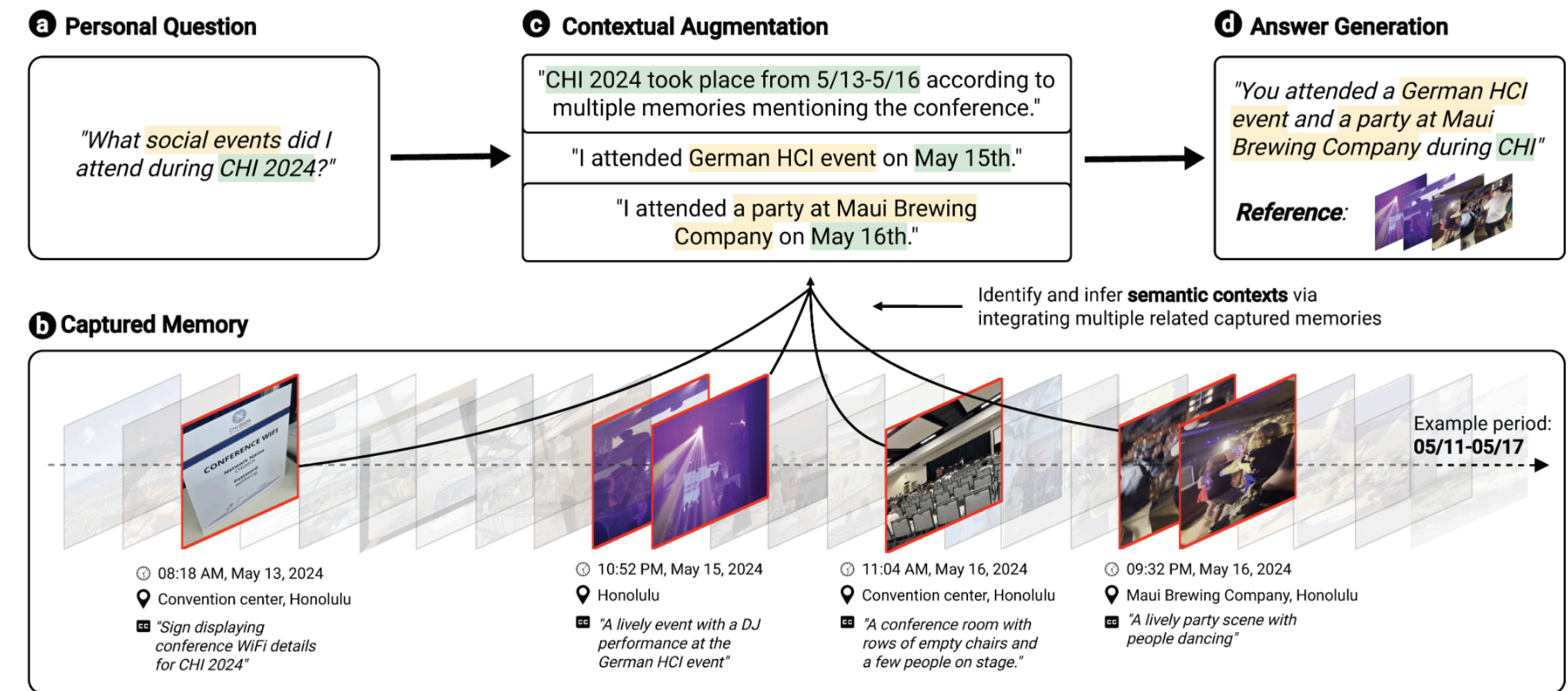
# Leveraging Context for Interaction



A

[OmniActions: Predicting Digital Actions in Response to Real-World Multimodal Sensory Inputs with LLMs](#)

Li et al. CHI 2024

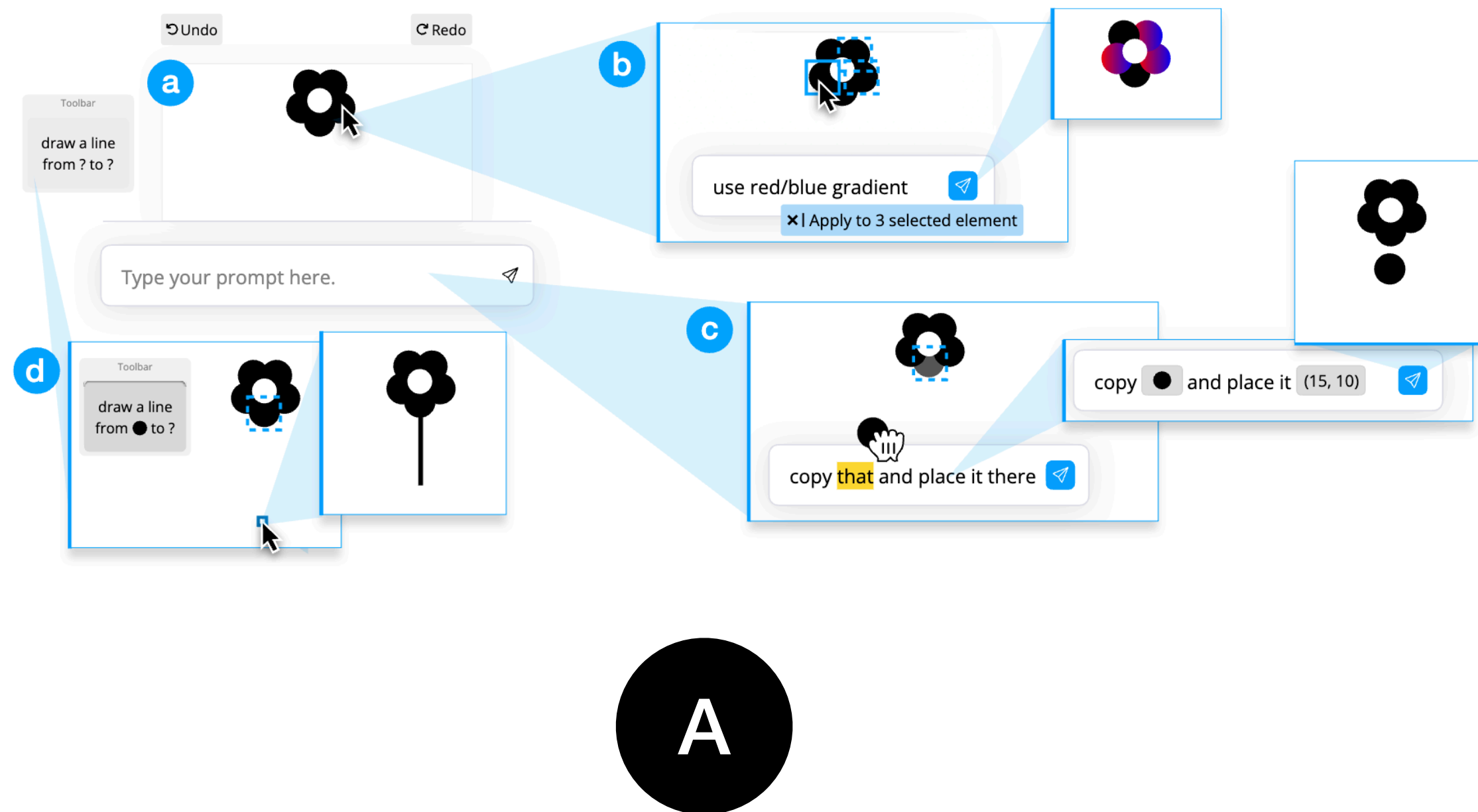


B

[OmniQuery: Contextually Augmenting Captured Multimodal Memories to Enable Personal Question Answering](#)

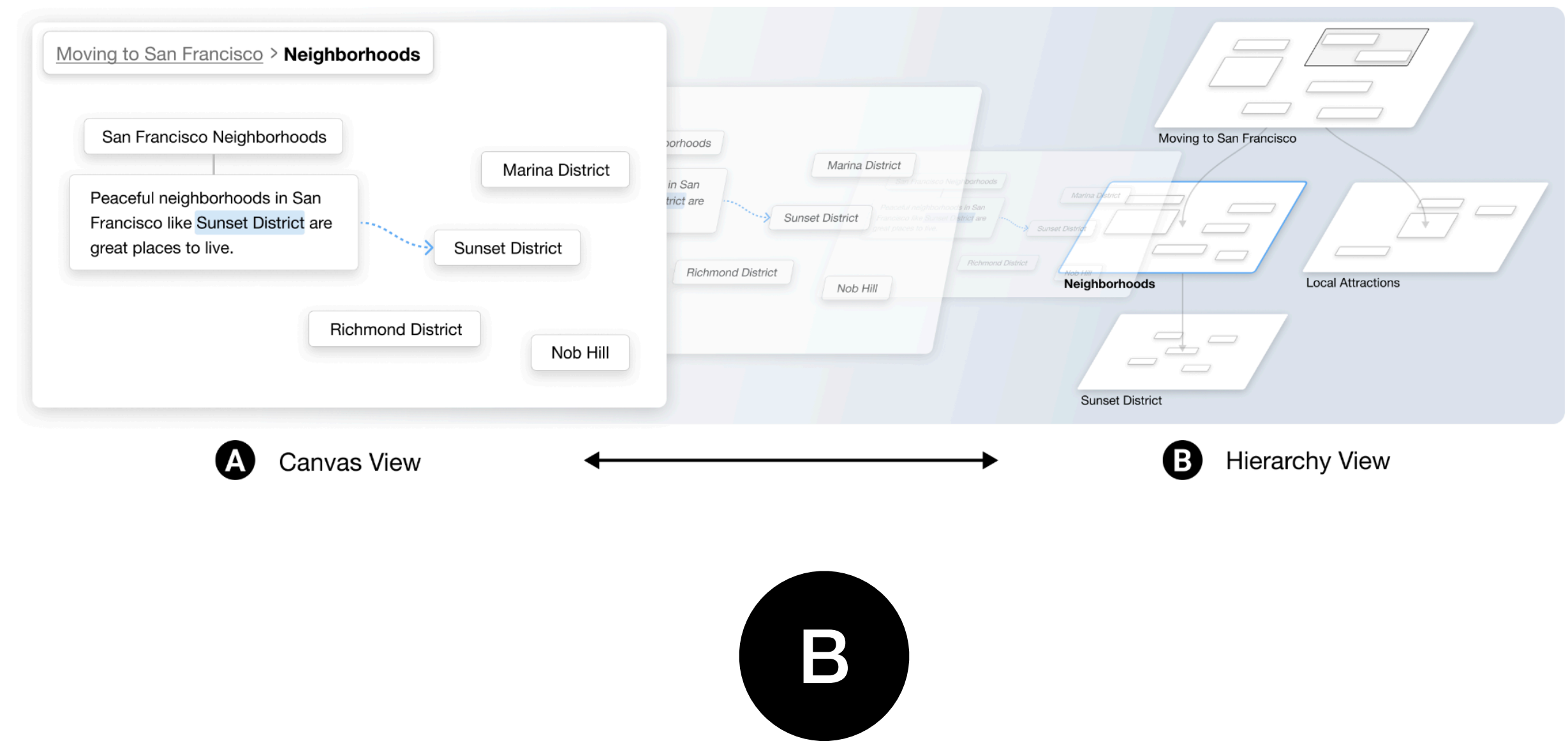
Li et al. CHI 2025

# Beyond Chat-based Interfaces



[DirectGPT: A Direct Manipulation Interface to Interact with Large Language Models](#)

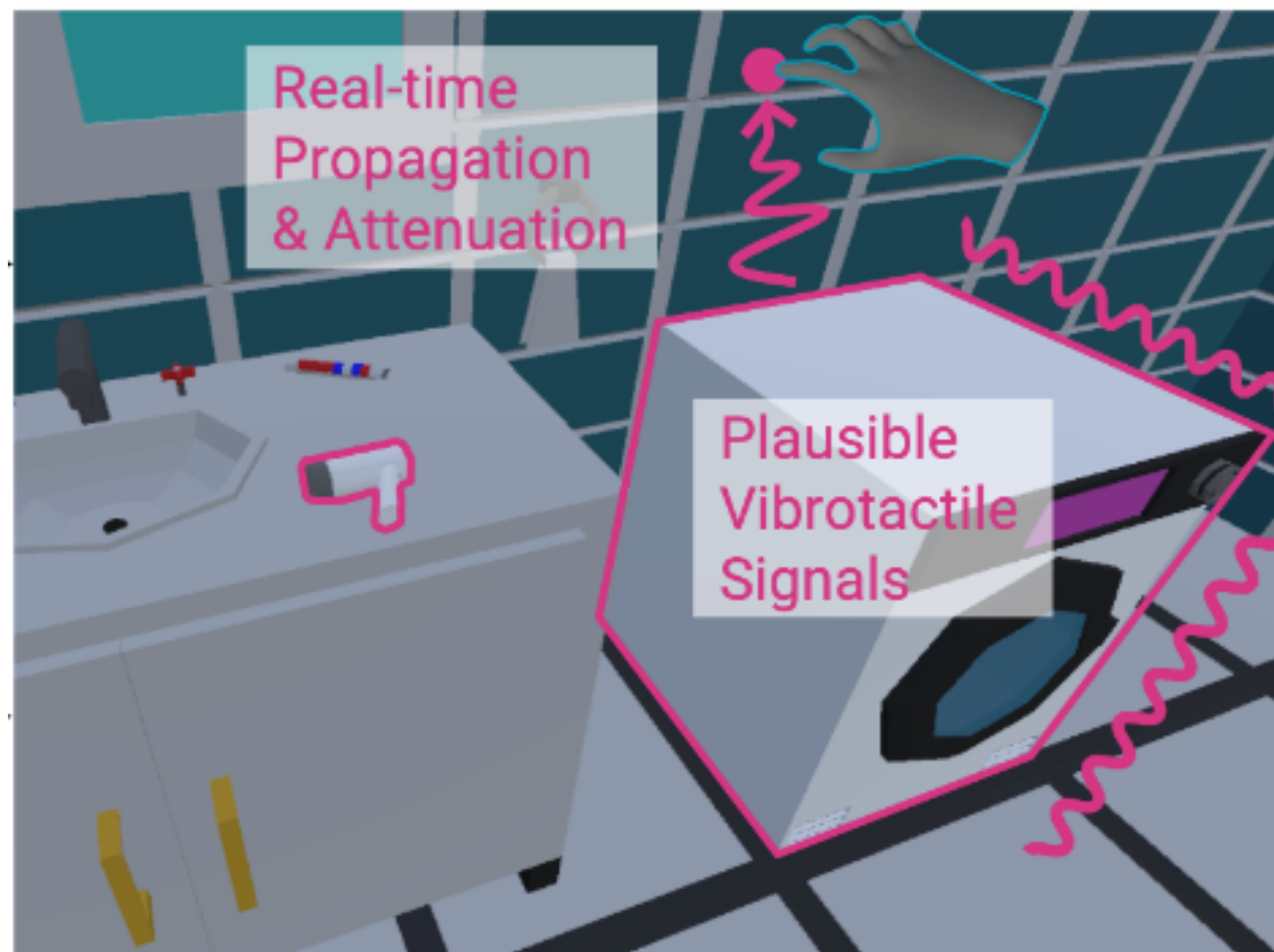
Masson et al. CHI 2024



[Sensecape: Enabling Multilevel Exploration and Sensemaking with Large Language Models](#)

Suh et al. CHI 2024

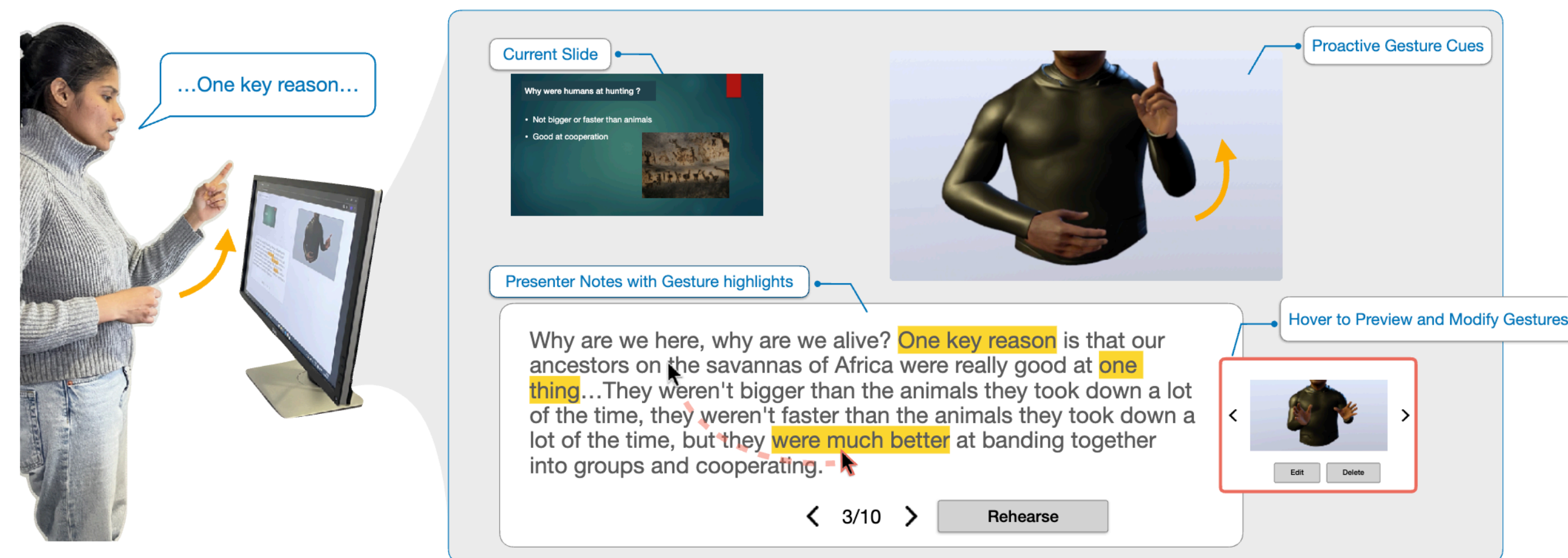
# Beyond Text & Images



A

[Scene2Hap: Generating Scene-Wide Haptics for VR from Scene Context with Multimodal LLMs](#)

Jingu et al. CHI 2026

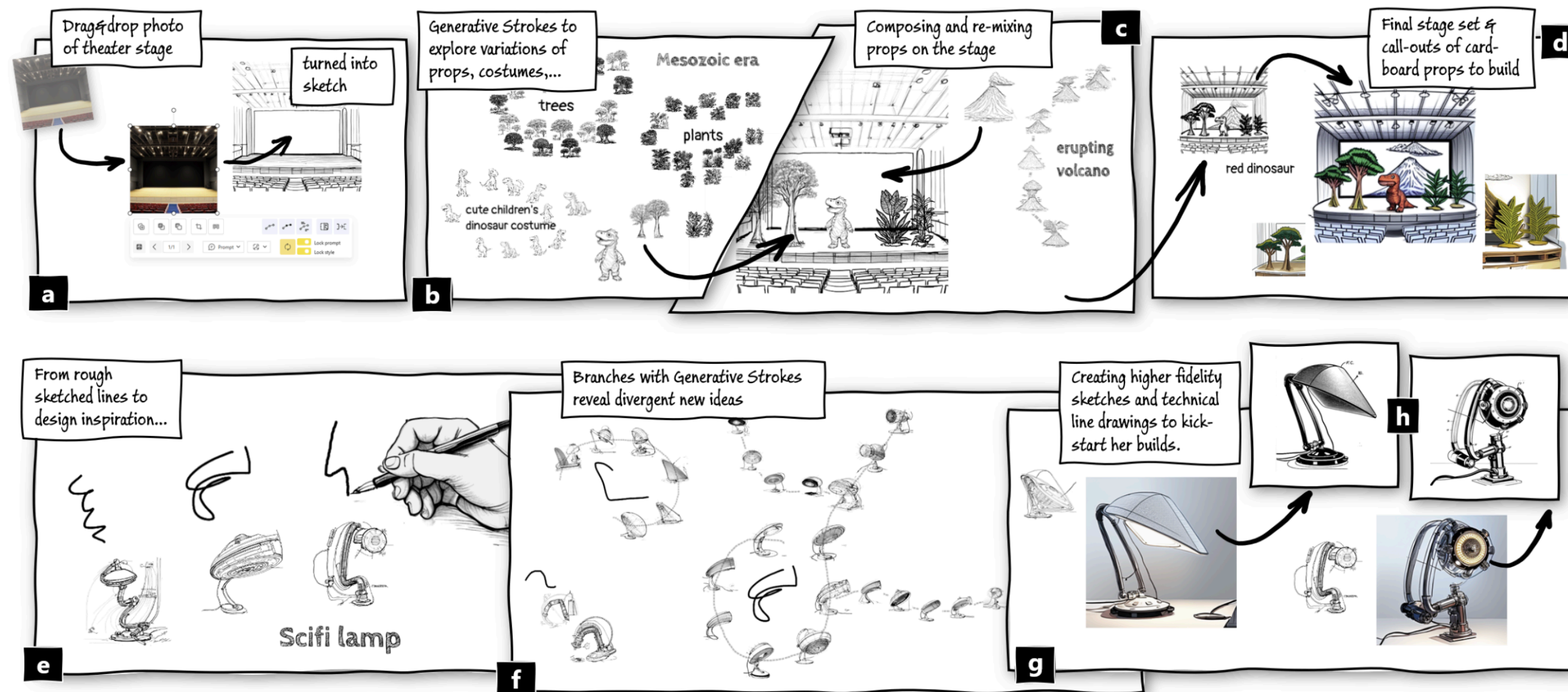


B

[GestureCoach: Rehearsing for Engaging Talks with LLM-Driven Gesture Recommendations](#)

Ram et al. UIST 2025

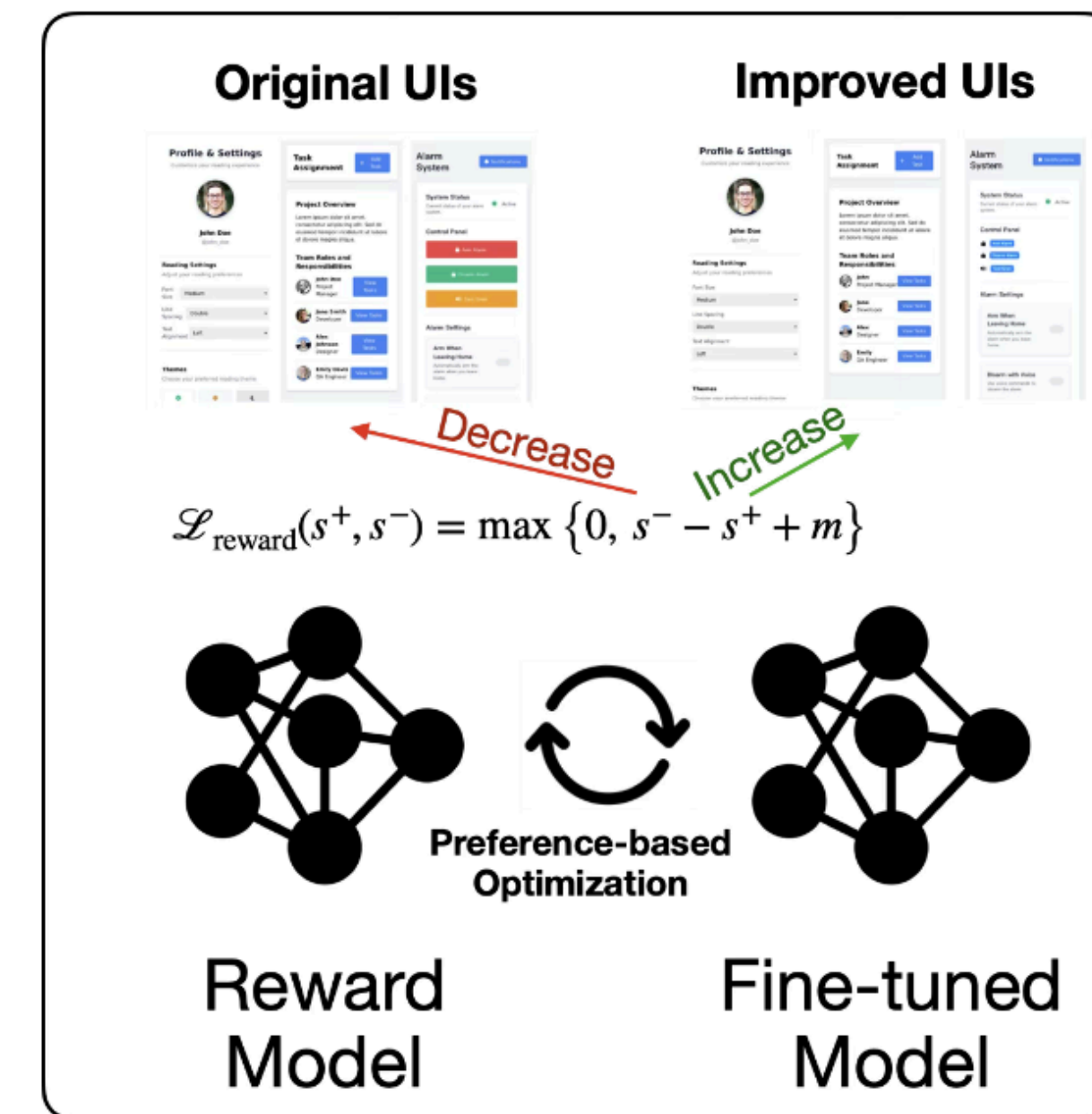
# Steering Generation



A

[ImaginationVellum: Generative-AI Ideation Canvas with Spatial Prompts, Generative Strokes, and Ideation History](#)

Marquardt et al. UIST 2025



B

[Improving User Interface Generation Models from Designer Feedback](#)

Wu et al. CHI 2026

# Next Steps

- Send your 3 preferred topics (in order of preference) to [ram@cs.uni-saarland.de](mailto:ram@cs.uni-saarland.de) with name and matriculation ID
  - Example:  
Ashwin Ram
    - 1) CLIP
    - 2) RAG
    - 3) Haptics
- Deadline: **24 April (Friday) 6:00 pm**

**Please register for the seminar on LSF by **May 13th, 2026.****

**Thank you!**  
**Questions?**