

SOZIOLOGIE SCHWERPUNKT EUROPA

DR. TAEHEE KIM:

EVALUATING LLM-BASED AGENTS FOR SOCIAL MEDIA SIMULATION

Simulating social media users with generative agents has emerged as a promising methodological approach to studying social media dynamics, including information diffusion and opinion formation (Gao et al., 2024; Park et al., 2023; Törnberg et al., 2023). Such simulations allow researchers to explore counterfactual scenarios, scale empirical analyses, and reduce reliance on costly or incomplete behavioral data. However, the validity of such approaches hinges on a critical yet under explored question: to what extent can LLM-based agents faithfully replicate real users' attitudes and content production? Despite growing interest in LLM-driven social simulations, systematic empirical evaluations of their behavioral fidelity remain scarce (Larooij & Törnberg, 2025).

This study examines the capabilities and limitations of LLM-based generative agents constructed from social media timelines. Specifically, we investigate whether such agents can (1) infer a user's stance on a political topic that the user has not previously discussed, and (2) generate topic-relevant content that aligns with the user's real-world stance, tone, and style. Addressing both predictive and generative dimensions is crucial, as success in one does not necessarily imply success in the other.



Photo: ©Universität Konstanz

Dr. Taehee Kim (University of Konstanz) has been working as a postdoctoral research associate at the Chair of Social and Behavioral Data Science under Prof. Dr. David Garcia since January 2024. Her research focuses on how citizens' attitudes and behavior change over time.

**05.02.2026
16:30 – 18:00 Uhr**

Geb. C5.3, Raum 2.06