Yuxuan Li

Yassellee | Yassellee.github.io | yuxuan-l20@mails.tsinghua.edu.cn | +86 13926513675

EDUCATION

Tsinghua University, Department of Computer Science and Technology   2020.9 - 2024.7(Expected)

PUBLICATIONS AND PREPRINTS (*Indicating equal contribution)

- *Say Your Reason: Extract Contextual Rules In Situ for Context-aware Service Recommendation*
  Yuxuan Li, Jiahui Li, Lihang Pan, Chun Yu, Yuanchun Shi   Submitted to CHI 2024

- *A Human-Computer Collaborative Tool for Training a Single Large Language Model Agent into a Network through Few Examples*
  Lihang Pan*, **Yuxuan Li***, Chun Yu, Yuanchun Shi   Submitted to CHI 2024

- *Mirror, Mirror on the Wall: How Machine-Generated User Profiles Influence News Consumption Patterns and Beyond*
  Yuxuan Li*, Mingduo Zhao*, Coye Cheshire   Submitted to CHI 2024

SELECTED RESEARCH EXPERIENCE

The Influence of Machine-Generated User Profiles on News Consumption Patterns: Empirical Insights and Policy Implications   2023.5 - 2023.9

Advised by Prof. Coye Cheshire, University of California, Berkeley

- Adopted an empirical methodology using a custom-designed Google News experimental platform, with data procured from Prolific
- Conducted linear regression analyses to evaluate the (heterogeneous) treatment effects across diverse user profile dimensions
- Identified significant correlations between specific user profile dimensions and news consumption behaviors, and proposed relevant policy implications

SayRea: Utilizing Language Models for Contextual Attribute Extraction and Rule Formulation in Mobile Context-Aware Recommender Systems   2022.10 - 2023.7

Advised by Prof. Chun Yu, University of Washington - Tsinghua University, Access Computing Summer Program

- Formulated and developed algorithms leveraging language models to accurately extract contextual attributes from users' single-sentence explanations and build rules for mobile context-aware recommender systems
- Adapted the algorithmic framework for the design and development of the SayRea system, prioritizing in-situ contextual rule creation to minimize cognitive load
- Conducted a 10-day field study; results underscored the efficiency and accuracy of the devised algorithms in formulating contextual rules and recommending services
- Patent filed and under review

EasyLAN: A Human-Computer Collaborative Approach for the Design and Evolution of Multi-LLM-Agent Networks   2023.2 - 2023.8

Advised by Prof. Chun Yu and Prof. Yuanchun Shi, Tsinghua University

- Developed and implemented algorithms to facilitate the evolution of a single LLM agent into a multi-agent network under human supervision using a limited set of examples
- Built the EasyLAN system leveraging the aforementioned algorithms, designed to aid users in collaboratively creating multi-agent networks
- Conducted extensive user studies across diverse scenarios; findings demonstrated a significant enhancement in collaborative network design capabilities via EasyLAN
- Patent filed and under review

Assessing the Capability of Large Language Models to Replace Human Workers   2023.3 - 2023.7

Advised by Prof. John Canny, University of California, Berkeley

– Investigated the extent of automation potential through large language models across various occupations and explored the underlying factors responsible for both anticipated and unexpected outcomes

Generative AI as a Tool for Persuasion: A Comparative Study on Strategies to Address Polarization   2023.3 - Present

Advised by Prof. John Canny and Prof. Ganesh Iyer, University of California, Berkeley

– Designed a comprehensive comparative study using Qualtrics to investigate the treatment effects of various generative AI-related persuasion strategies, with an emphasis on addressing polarization
– Plan to submit findings to *Nature*

The Influence of Large Language Model-Driven Synthetic Entities on User Perceptions and Behaviors in a Facebook Environment   2023.8 - Present

Advised by Prof. Coye Cheshire, University of California, Berkeley

– Employed LLM to simulate synthetic entities mirroring the behaviors of actual Facebook users and investigated on their potential influence on the perceptions and behaviors of users in real Facebook environment

InteractAds: A Human-Computer Collaborative Approach for Enhanced Customer Engagement with Interactive Tailored Advertisements   2023.7 - Present

Advised by Prof. Jeremy Z Yang, Harvard University

– Developed and deployed the InteractAds system, a novel approach to advertisement generation, designed to enhance customer engagement by dynamically tailoring content based on individual preferences

WORK EXPERIENCE

- **Chief Engine Developer**   Talegine (start-up), 2023.6 - Present

– Engineered a sophisticated storytelling engine that dynamically interacts with readers, driving narrative progression based on reader feedback
– Leveraged algorithmic techniques and narratological theories to optimize the balance between reader autonomy and high-caliber aesthetic narrative quality

ACADEMIC SERVICES

- **Reviewer, CHI 2024**   2023.9 - Present
- **Teaching Assistant, Student Research Training on HCI**   Tsinghua University, 2022.12 - 2023.7

AWARDS AND HONORS

- **Academic Excellence Scholarship**   Tsinghua University, 2023 and 2022
- **Sport Excellence Scholarship**   Tsinghua University, 2021
- **Freshman Scholarship**   Tsinghua University, 2020
- **Top 10 in National Semi-final**   Jittor National Artificial Intelligence Competition, 2022

SKILLS

- **Programming Languages:** Python, Java, C++, Rust, System Verilog
- **Deep Learning:** PyTorch, Jittor
- **English:** Toefl 115 (R:30, L:29, S:26, W:30)