# Yuxuan Li

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

## Education

B.Eng in Computer Science and Technology, Tsinghua University 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

- **Co-Founder/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)