Sitong Wang

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Research Interests

Human-AI Interaction, Agentic AI, Creativity and Productivity Support Tools

Education

2020-NOW **Ph.D. in Computer Science**, Columbia University

Advised by: Lydia B. Chilton

M.S. in Computer Science, Columbia University *Advised by:* Lydia B. Chilton; *Track:* Machine Learning

2015-2020 **B.S. in Electrical Engineering**, University of Cincinnati

B.E. in Electrical Engineering and Automation, Chongqing University

Awards and Honors

Aug 2023 Code Quality Jam Best Robustness Award

Adobe Research

Sep 2022 Greenwoods Fellowship Receipent

Columbia University

Jun 2021 Google CS Research Mentorship Program Class of 2021

Google Research

Nov National Scholarship Recipient

^{2017&2018} Chinese Ministry of Education

Publications

UNDER SUBMISSION

2025 [M.3] Schemex: Interactive Structural Abstraction from Examples with Contrastive Re-

finement.

Sitong Wang, Samia Menon, Dingzeyu Li, Xiaojuan Ma, Richard Zemel, Lydia B. Chilton.

Under submission to UIST'25.

2025 [M.2] JumpStarter: Human-AI Planning with Task-Structured Context Curation.

 $Xuanming\ Zhang^*, \underline{Sitong\ Wang}^*, Jenny\ Ma,\ Alyssa\ Hwang,\ Zhou\ Yu,\ Lydia\ B.\ Chilton.$

Under submission to EMNLP'25.

2025 [M.1] DoubleAgents: AI Agents for Task Execution and Evaluation in Human Coordination Problems.

Tao Long*, Xuanming Zhang*, <u>Sitong Wang</u>, Arav Dhoot, Zhou Yu, Lydia B. Chilton. *Under submission to EMNLP'25*.

CONFERENCE AND JOURNAL PAPERS

2024 [C.13] Copying style, Extracting value: Illustrators' Perception of AI Style Transfer and its Impact on Creative Labor.

Julien Porquet, Sitong Wang, Lydia B. Chilton.

In ACM Conference on Human Factors in Computing Systems (CHI'25).

2024 [C.12] DynEx: Dynamic Code Synthesis with Structured Design Exploration for Accelerated Exploratory Programming.

Jenny Ma, Karthik Sreedhar, Vivian Liu, Pedro A. Perez, <u>Sitong Wang</u>, Riya Sahni, Lydia B. Chilton.

In ACM Conference on Human Factors in Computing Systems (CHI'25).

Best Paper Honorable Mention Award (Top 5%)

2024 [C.11] MoodSmith: Enabling Mood-Consistent Multimedia for AI-Generated Advocacy Campaigns.

Samia Menon, Sitong Wang, Lydia B. Chilton.

In International Conference on Computational Creativity (ICCC'24).

2024 [C.10] PodReels: Human-AI Co-Creation of Video Podcast Teasers.

Sitong Wang, Zheng Ning, Anh Truong, Mira Dontcheva, Dingzeyu Li, Lydia B. Chilton. *In ACM Designing Interactive Systems Conference (DIS'24)*.

2024 [C.9] ReelFramer: Human-AI Co-Creation for News-to-Video Translation.

Sitong Wang, Samia Menon, Tao Long, Keren Henderson, Dingzeyu Li, Kevin Crowston, Mark Hansen, Jeffrey V. Nickerson, Lydia B. Chilton.

In ACM Conference on Human Factors in Computing Systems (CHI'24).

2024 [C.8] A Design Space for Intelligent and Interactive Writing Assistants.

Mina Lee, Katy Ilonka Gero, John Joon Young Chung, [et al., including Sitong Wang]. In ACM Conference on Human Factors in Computing Systems (CHI'24).

2023 [C.7] Tweetorial Hooks: Generative AI Tools to Motivate Science on Social Media.

Tao Long, Dorothy Zhang, Grace Li, Batool Taraif, Samia Menon, Kynnedy Simone Smith, Sitong Wang, Katy Ilonka Gero, Lydia B. Chilton.

In International Conference on Computational Creativity (ICCC'23).

2023 [C.6] PopBlends: Strategies for Conceptual Blending with Large Language Models.

Sitong Wang, Savvas Petridis, Taeahn Kwon, Xiaojuan Ma, Lydia B. Chilton.

In ACM Conference on Human Factors in Computing Systems (CHI'23).

2022 [C.5] Metaphoraction: Support Gesture-based Interaction Design with Metaphorical Meanings.

Zhida Sun, Sitong Wang, Chengzhong Liu, Xiaojuan Ma.

In ACM Transactions on Computer-Human Interaction (TOCHI'22).

2022 [C.4] Know it to Defeat it: Exploring Health Rumor Characteristics and Debunking Efforts on Chinese Social Media during COVID-19.

Wenjie Yang, Sitong Wang*, Zhenhui Peng*, Chuhan Shi, Diyi Yang, Xiaojuan Ma. *In AAAI International Conference on Web and Social Media (ICWSM'22)*.

2021 [C.3] MetaMap: Supporting Visual Metaphor Ideation through Multi-dimensional Example-based Exploration.

Youwen Kang*, Zhida Sun*, <u>Sitong Wang</u>, Zeyu Huang, Ziming Wu, Xiaojuan Ma. *In ACM Conference on Human Factors in Computing Systems (CHI'21).*

2020 [C.2] "A Postcard from Your Food Journey in the Past": Promoting Self-Reflection on Social Food Posting.

Zhida Sun, Sitong Wang, Wenjie Yang, Onur Yürüten, Chuhan Shi, Xiaojuan Ma. *In ACM Designing Interactive Systems Conference (DIS'20)*.

2020 [C.1] A Student Engagement Evaluation Methodology Inspired from Usability Engineering for Extracting Course Design Requirements.

Sitong Wang, Panagiotis Apostolellis.

In American Society for Engineering Education Annual Conference (ASEE'20).

WORKSHOP PAPERS

2025 [M.2] Schemex: Discovering Design Patterns from Examples with Iterative Abstraction and Refinement.

Sitong Wang, Lydia B. Chilton.

In Tools for Thought: Research and Design for Understanding, Protecting, and Augmenting Human Cognition with Generative AI (CHI'25 workshop).

2023 [W.1] Writing with Generative AI: Multi-modal and Multi-dimensional Tools for Journalists.

Sitong Wang, Lydia B. Chilton, Jeffery V. Nickerson.

In the Second Workshop on Intelligent and Interactive Writing Assistants (CHI'23 workshop).

Research Experience

2020-NOW Computational Design Lab, Columbia University

Advised by: Lydia B. Chilton

Developed an AI-driven interactive system to help journalists transform print articles into social media reels [C.9]; Designed an automated pipeline that combines knowledge extraction with large language models to blend a given topic with pop culture domains [C.6].

Summer 2023 Interactive Creativity Lab, Adobe Research

Advised by: Dingzeyu Li, Anh Truong, Mira Dontcheva

Derived design principles for video podcast teasers through interviews, designed a human-AI co-creative workflow, and implemented a Premiere plugin that integrates with creators' existing workflows, significantly easing their mental burden and enhancing efficiency [C.10].

Summer 2020 **Human-Computer Interaction Lab**, Hong Kong University of Science and Technology *Advised by:* Xiaojuan Ma, Diyi Yang

Conducted a literature survey on online health rumors, contributing to both quantitative and qualitative analyses [C.4]; Analyzed the visual metaphor creation process through interviews, contributed to user studies and framework design for visual metaphor ideation [C.3].

Summer 2019 **Human-Computer Interaction Lab**, Hong Kong University of Science and Technology *Advised by:* Xiaojuan Ma

Helped propose an automated postcard generation system based on social media food posts to promote self-reflection on health [C.2]; Conducted a literature survey on mobile gestures and analyzed user interpretations from an MTurk study to derive design principles [C.5].

Teaching Experience

Fall 2023 COMS 6998 Designing for Generative AI

Teaching Assistant, Columbia University

Fall 2022	COMS 6998 Advanced Web Design Studio Teaching Assistant, Columbia University
Spring 2020	ENED 1120 Foundations of Engineering Design Thinking II Teaching Assistant, University of Cincinnati
	Mentoring Experience
2023-NOW	Samia Menon (Columbia CS undergraduate student) EECS PhD student at the University of California, Berkeley
2024-2025	Jenny Ma (Columbia CS masters student) CS PhD student at Columbia University
2024-2025	Karthik Sreedhar (Columbia CS masters student) CS PhD student at Columbia University
2023-2024	Grace Li (Barnard CS undergraduate student) CS PhD student at the University of Chicago
	Community Service
2025	Program Committee Member. The ACM conference on Creativity & Cognition (C&C)
2025	Reviewer. The Annual Meeting of the Association for Computational Linguistics (ACL)
2025	Reviewer. International Conference & Exhibition on Computer Graphics & Interactive Techniques (SIGGPRAH)
2023-2025	Reviewer. The ACM Conference on Human Factors in Computing Systems (CHI)
2024-2025	Reviewer. The ACM Symposium on User Interface Software and Technology (UIST)
2024-2025	Reviewer. The ACM Designing Interactive Systems conference (DIS)
2023-2024	Reviewer. The ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW)
2023-2024	Reviewer. AAAI International Conference on Web and Social Media (ICWSM)
2024	Reviewer. International Journal of Human-Computer Interaction (IJHCI)
2024	Reviewer. ACM Transactions on Intelligent Systems and Technology (TIST)
2023	Reviewer. ACM Transactions on Computer-Human Interaction (TOCHI)
2022-2024	Volunteer. Columbia CS PhD Pre-submission Application Review Program
	Professional Experience
Summer 2025	STORIE Lab, Adobe Research Research Scientist/Engineer Intern
Summer 2023	Interactive Creativity Lab, Adobe Research Research Scientist/Engineer Intern
Spring 2022	Alexa Mobile Application Development Group , Amazon Software Engineer
Summer 2021	Alexa Mobile Application Development Group , Amazon Software Engineer Intern