Kevin (Jiankai) Pu

University of Toronto (DGP Lab)
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https://kevinpjk.github.io/

PRINCIPAL INTERESTS

Human-AI Interaction; Human-Computer Interaction

My research focuses on leveraging machine intelligence to build systems that align with human capabilities, facilitating mixed-initiative and AI-proactive collaboration workflows for complex tasks like automation, programming, and ideation.

ACADEMIC BACKGROUND

Ph.D. in Computer Science　　　　　　　　　　　　　Jan 2023 - Present
University of Toronto, Canada
Supervisors: Dr. Tovi Grossman, Dr. Yan Chen

M.Sc. in Computer Science　　　　　　　　　　　　　Sep 2021 - Jan 2023
University of Toronto, Canada
Supervisor: Dr. Tovi Grossman

B.Sc. in Computer Science and Psychology　　　　　Sep 2017 - May 2021
University of Michigan, Ann Arbor, MI, USA
Supervisor: Dr. Nikola Banovic

PUBLICATIONS

In Submission

Kevin Pu, Ting Zhang, Naveen Sendhilnathan, Sebastian Freitag, Raj Sodhi, Tanya Jonker. 2025. ProMemAssist: Exploring Timely Proactive Assistance Through Working Memory Modeling in Multi-Modal Wearable Devices. *Conditionally accepted to UIST '25.*

Sangho Suh, Michael Lai, **Kevin Pu**, Steven P. Dow, Tovi Grossman. 2025. StoryEnsemble: An AI-Powered Framework for Iterative Design and Creative Exploration. *Conditionally accepted to UIST '25.*

K. J. Kevin Feng, **Kevin Pu**, Matt Latzke, Tal August, Pao Siangliulue, Jonathan Bragg, Daniel S. Weld, Amy X. Zhang, Joseph Chee Chang. 2025. Cocoa: Co-Planning and Co-Execution with AI Agents. *arXiv preprint*

Conference Proceedings

Kevin Pu, K. J. Kevin Feng, Tovi Grossman, Tom Hope, Bhavana Dalvi Mishra, Matt Latzke, Jonathan Bragg, Joseph Chee Chang, and Pao Siangliulue. 2025. IdeaSynth: Iterative Research Idea Development Through Evolving and Composing Idea Facets with Literature-Grounded Feedback. *In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)*

Kevin Pu, Daniel Lazaro, Ian Arawjo, Haijun Xia, Ziang Xiao, Tovi Grossman, and Yan Chen. 2025. Assistance or Disruption? Exploring and Evaluating the Design and Trade-offs of Proactive AI Programming Support. *In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25).*

Xiaohang Tang, Sam Wong, **Kevin Pu**, Xi Chen, Yalong Yang, and Yan Chen. 2024. VizGroup: An AI-Assisted Event-Driven System for Real-Time Collaborative Programming Learning Analytics. *In Proceedings of the 37th Annual ACM Symposium on User Interface Software and Technology (UIST '24).*

Suhyeon Yoo, **Kevin Pu**, and Khai N Truong. 2024. Behind the Pup-ularity Curtain: Understanding the Motivations, Challenges, and Work Performed in Creating and Managing Pet Influencer Accounts. *In Proceedings of the CHI Conference on Human Factors in Computing Systems (CHI '24).*

Kevin Pu, Jim Yang, Angel Yuan, Minyi Ma, Rui Dong, Xinyu Wang, Yan Chen, and Tovi Grossman. 2023. DiLogics: Creating Web Automation Programs with Diverse Logics. *In Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23).*

Kevin Pu, Rainey Fu, Rui Dong, Xinyu Wang, Yan Chen, and Tovi Grossman. 2022. SemanticOn: Specifying Content-Based Semantic Conditions for Web Automation Programs. *In Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (UIST '22).*
UIST 2022 Best Paper Honorable Mention Award (Top 10%)

RESEARCH EXPERIENCE	**Research Scientist Intern**	Oct 2024 - Mar 2025
	Meta Reality Labs	
	Timely proactive AI assistance on multi-modal wearable devices	
	Research Intern - PhD	May 2024 - Sep 2024
	Semantic Scholars - Allen Institute for AI (Ai2)	
	Interactive interfaces for human-AI collaborative research ideation	
	PhD Researcher	Sep 2021 - Present
	Spatial Interaction Group - DGP Lab - University of Toronto	
	Undergraduate Research Assistant	Jan 2020 - May 2021
	Computational HCI Lab - University of Michigan, Ann Arbor	

ACADEMIC SERVICE

Service
UIST 2024 (Student Volunteer)
UIST 2023 (Student Volunteer)

Reviewing
CHI 2023, 2024, 2025 (Paper)
UIST 2024, 2024 (Paper)
CSCW 2023, 2024 (Paper)

TEACHING

Teaching Assistant

CSC 309 - Programming on the Web	Jan 2024 - May 2024
CSC 318 - The Design of Interactive Computational Media	Sep 2023 - Dec 2023
CSC 207 - Software Design	Sep 2022 - Jan 2023
CSC 108 - Introduction to Computer Programming	Sep 2021 - May 2022

AWARDS   **Wolfond Scholarship Program In Wireless Information Technology**   2024
Valued at $5,000 over the academic year

	Department Of Computer Science Graduate Program Award	2023
	Valued at $2,000 over the academic year	
	James B. Angell Scholar	2020
	Awarded for two consecutive terms of straight A's	
	Electrical Engineering & Computer Science Scholar Award	2019
	Awarded for EECS seniors with > 3.9 GPA	
	William J. Branstrom Freshman Prize	2018
	Awarded to upper five percent of the freshman class	

OTHER EMPLOYMENT	**Software Engineering Intern** InterSystems	Jun 2021 - Aug 2021
	Full-stack Student Developer Learning A-Z	Jan 2020 - Dec 2020
	Data System Intern Horizon	Jun 2019 - Aug 2019
SUPERVISORY EXPERIENCE	**Daniel Lazaro** University of Toronto	May 2023 - Sep 2023
	Minyi Ma University of Toronto	Jan 2023 - May 2023
	Jim Yang University of Toronto	May 2022 - Sep 2022
	Angel Yuan University of Toronto	May 2022 - Sep 2022
	Rainey Fu University of Toronto	Jan 2022 - May 2022