

Minsuk Chang

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I am a research scientist and a technical leader at NAVER AI, where I build and evaluate AI powered systems with users in the loop. I explore novel computational interaction techniques powered by AI technologies. My current research interests are 1) making massive scale language models usable and useful, 2) modeling conversational interactions, and 3) simulation-based models of users and interfaces.

CURRENT POSITION

NAVER

Technical Leader, NAVER AI Lab

Research Scientist

Technical Leader, Computational Interaction, NAVER Clova

- HyperCLOVA (a.k.a. Korean GPT-3) project

Seongnam, South Korea

April, 2021 – Present

Sept, 2020 – Present

Dec, 2020 – Aug, 2021

KAIST Graduate School of AI

Adjunct Professor

Daejeon, South Korea

Oct, 2021 – Present

EDUCATION

Korea Advanced Institute of Science and Technology

PhD in Computer Science, Advisor: Juho Kim

Thesis Title: Mining Sequential Knowledge for Interaction Design

- 2021 Outstanding Thesis Award

Daejeon, South Korea

2014-2021

Rutgers, The State University of New Jersey

MSc in Statistics

New Brunswick, NJ, USA

2012-2014

KAIST Business School, Graduate School of Finance

MSc in Finance with specialization in Financial Engineering, Advisor: Jangkoo Kang

Thesis Title: An Empirical Study on the Existence of Momentum Profits in Asian Stock Markets

- 2011 Best Thesis Award

Seoul, South Korea

2009-2011

Simon Graduate School of Business, University of Rochester

MSc in Finance - Dual Degree Program with KAIST Business School

Rochester, NY, USA

2010

Korea Advanced Institute of Science and Technology

BSc in Computer Science

Daejeon, South Korea

2003-2008

PREVIOUS EXPERIENCES

Microsoft Research + AI

Research Intern, Information and Data Sciences Group

- Investigating techniques for recovering from conversational interaction failures

Redmond, WA, USA

June – Sept, 2019

Autodesk Research

User Interface Research Intern, User Interface Group

- Investigating techniques for modeling user demonstrations to capture semantic subgoals
- Building data-driven interfaces by utilizing different streams of user interaction trace

Toronto, ON, Canada

Nov, 2018 – Apr, 2019

Adobe Research

Summer PhD Intern, Creative Intelligence Lab

- Building novel conversational interaction techniques for video interfaces
- Understanding and designing voice user interactions for learning with how-to videos

Seattle, WA, USA

Jun – Sept, 2018

SELECTED PUBLICATIONS

Sungdong Kim, **Minsuk Chang**, and Sang-Woo Lee, *NeuralWOZ: Learning to Collect Task-Oriented Dialogue via Model-Based Simulation*, In ACL 2021 (oral).

Minsuk Chang, Mina Huh, and Juho Kim, *RubySlippers: Supporting Content-based Voice Navigation for How-to Videos*, In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2021.

Seungwon Do, **Minsuk Chang**, and Byungjoo Lee, *A Simulation Model of Intermittently Controlled Point-and-Click Behavior*, In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2021. ****Honorable Mention****

Minsuk Chang, Ben Lafreniere, Juho Kim, George Fitzmaurice, Tovi Grossman, “*Workflow Graphs: A Computational Model of Collective Task Strategies for 3D Design Software*”, *Proceedings of the 45th Graphics Interface Conference on Proceedings of Graphics Interface 2020*. Canadian Human-Computer Communications Society, 2020.

Minsuk Chang, Anh Truong, Oliver Wang, Maneesh Agrawala, Juho Kim. “*How to Design Voice Based Navigation for How-To Videos*” Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2019.

Minsuk Chang, Leonore V. Guillain, Hyeungshik Jung, Vivian M. Hare, Juho Kim, and Maneesh Agrawala. “*RecipeScope: An Interactive Tool for Analyzing Cooking Instructions at Scale*” Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, 2018

SERVICES

Organizing Committee

- SIGCHI Operations Committee (2020-present)
- UIST 2021, 2022 Publicity Co-Chair
- CHI 2021 Video Capture Co-Chair
- ISS 2019 Video Chair

Program Committee

- HCOMP 2021
- CHI 2022
- UIST 2021, 2022
- CSCW 2021
- Viz Meets AI 2021, 2022
- WWW 2020, 2021, 2022
- GI 2020
- CHI 2019 LBW, 2021 SRC

Reviewer

- IUI 2022
- CHI 2017, 2018, 2019, 2020, 2020 LBW, 2021, 2021 LBW
- CSCW 2018, 2019, 2020 (Outstanding Review)
- UIST 2017, 2018, 2020
- MobileHCI 2019
- IMWUT 2020 (Outstanding Review)

Student Volunteer

- CHI 2017
- UIST 2017, 2018
- ICML 2020

Invited Talks and Panels

- Septemebr 2021: Invited talk at Kangwon National University, Department of Computer Science and Engineering
- Septemebr 2021: Invited talk at SungKyunKwan University (SKKU) College of Computing and Informatics in Sepetember
- August 2021 : Invited talk at POSTECH, Computer Science and Engineering
- July 2021 : Invited on the industry panel for CUI 2021 conference to discuss the future of conversational interfaces.
- Mar 2021 : Invited talk on data-driven interfaces at Yonsei University, Department of Computer Science
- Aug 2020 : Invited on the panel for AI for Video-Based Learning Workshop at L@S 2020.
- Oct 2019 : Invited Talk at Berkeley Institute of Design - Fall 2019 Seminar Series
- Oct 2019 : Invited Talk at MIT CSAIL HCI Seminar Series 2019
- May 2019 : Invited to give a talk on data-driven techniques for user task modeling @ Institute of Basic Science