John Joon Young Chung

Ph.D. Candidate CONTACT Computer Science and Engineering, University of Michigan Email: jjyc@umich.edu 2260 Hayward St, Ann Arbor, MI 48109 MI 48109, United States URL: http://johnr0.github.io RESEARCH Human-Computer Interaction (HCI), particularly, AI-powered Creativity Support Tools for art-making that allow flexible user expressions of artistic intentions. **INTERESTS EDUCATION** University of Michigan Ann Arbor, MI Ph.D. candidate in Computer Science and Engineering SEP. 2018 - Present Advisor: Eytan Adar, Ph.D. **Seoul National University (SNU)** Seoul, Korea B.S. in Electrical and Computer Engineering - Summa Cum Laude. MAR. 2011 - FEB. 2017 Ranked 3rd place from the top among 174 students in own dept. GPA: 4.12/4.3 Special Recognitions for Outstanding Reviews ACM Creativity&Cognition 2022 2022 HONORS AND AWARDS Special Recognitions for Outstanding Reviews ACM UIST 2021 2021 Special Recognitions for Outstanding Reviews ACM CHI 2021 2021 Special Recognitions for Outstanding Reviews ACM CHI 2020 2020 2019 UTC Outstanding Student of the Year Award 2020 Honorable Mention Award ACM CSCW 2019 2019 CSE fellowship (for 1 year) University of Michigan 2018 Best Paper Runner-Up Award HCOMP GroupSight 2017 2017 Graduation Award Alumni Association of College of Engineering, SNU 2017 2nd place and a popularity award Information Science and Culture Project Exhibition Awards, SNU 2016 Special Award Anyang Super Rookie Festival 2016 Encouragement Award Writing in Science & Technology Research Competition, SNU 2015 National Scholarship for Science and Engineering (4 years) 2011 - 2017 RESEARCH **Microsoft Research** Redmond, WA MAY. 2022 – AUG. 2022 Research Intern EXPERIENCE Mentor: Saleema Amershi and Ece Kamar Naver AI Lab Seongnam, Korea Research Intern MAY. 2021 - SEP. 2021 Mentor: Minsuk Chang **Adobe Research** Seattle, WA MAY. 2020 - AUG. 2020 Research Intern at Creative Intelligence Lab Mentor: Rubaiat Habib **University of Michigan** Ann Arbor, MI Graduate Student and Researcher SEP. 2018 – Present Kixlab, KAIST Daejeon, Korea Full-time Researcher Ap. 2017 – Jul. 2018 Mentor: Juho Kim **Referred Publications** (5×CHI, 3×CSCW, 2×DIS) **PUBLICATIONS** In submission 1. Leveraging Double-edged Sword: Diversified and Accurate Text Data Generation with Language

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John Joon Young Chung, Ece Kamar, Saleema Amershi. In submission to IUI2023.

Models and Human Interventions

- 2. Artinter: AI-powered Boundary Objects for Commissioning Visual Arts John Joon Young Chung, Eytan Adear. In submission to *CHI2023*.
- 3. Neglected Free Lunch Learning Image Classifiers Using Annotation Byproducts
 Dongyoon Han, Junsuk Choe, Seonghyeok Chun, John Joon Young Chung, Minsuk Chang, Sangdoo
 Yun, Jean Y. Song, Seong Joon Oh. In submission to *CVPR2023*.

Published

- 1. Artist Support Networks: Implications for Future Creativity Support Tools

 John Joon Young Chung, Shiqing He, Eytan Adear. In *Proceedings of DIS 2022: ACM Conference on Designing Interactive Systems* (acceptance rate: 21.5%).
- 2. TaleBrush: Sketching Stories with Generative Pretrained Language Models

 John Joon Young Chung, Wooseok Kim, Kang Min Yoo, Hwaran Lee, Eytan Adar, and Minsuk
 Chang. In *Proceedings of CHI 2022: ACM Conference on Human Factors in Computing Systems* (Accepted with minor revision, acceptance rate: 12.5%).
- 3. Promptiverse: Scalable Generation of Scaffolding Prompts through Human-AI Knowledge Graph Annotation
 - Yoonjoo Lee, **John Joon Young Chung**, Taesoo Kim, Jean Y. Song, Juho Kim. In *Proceedings of CHI 2022: ACM Conference on Human Factors in Computing Systems* (Accepted with minor revision, acceptance rate: 12.5%).
- 4. **FlatMagic:** Improving Webcomic Flat Colorization through AI-driven Design for Professionals Chuan Yan, **John Joon Young Chung**, Kiheon Yoon, Yotam Gingold, Eytan Adar, Sungsoo Ray Hong. In *Proceedings of CHI 2022: ACM Conference on Human Factors in Computing Systems* (Accepted with minor revision, acceptance rate: 12.5%).
- PuzzleMe: Leveraging Peer Assessment for In-Class Programming Exercises
 April Wang, Yan Chen, John Joon Young Chung, Christopher Brooks, Steve Oney. In Proceedings of the ACM on Human-Computer Interaction CSCW2021.
- 6. The Intersection of Users, Roles, Interactions, and Technologies in Creativity Support Tools John Joon Young Chung, Shiqing He, Eytan Adar. In *Proceedings of DIS 2021: ACM Conference on Designing Interactive Systems* (acceptance rate: 27.7%).
- 7. Beyond Show of Hands: Engaging Viewers via Expressive and Scalable Visual Communication in Live Streaming
 - **John Joon Young Chung**, Hijung Valentina Shin, Haijun Xia, Li-Yi Wei, and Rubaiat Habib Kazi. In *Proceedings of CHI 2021: ACM Conference on Human Factors in Computing Systems* (acceptance rate: 26.3%).
- 8. Personalizing Ambience and Illusionary Presence: How People Use "Study with Me" Videos to Create Effective Studying Environments
 - Yoonjoo Lee, **John Joon Young Chung**, Jean Y. Song, Minsuk Chang, Juho Kim. In *Proceedings of CHI 2021: ACM Conference on Human Factors in Computing Systems* (acceptance rate: 26.3%).
- 9. C-Reference: Improving 2D to 3D Object Pose Estimation Accuracy via Crowdsourced Joint Object Estimation
 - Jean Y. Song, **John Joon Young Chung**, David F. Fouhey, and Walter S. Lasecki. In *Proceedings of the ACM on Human-Computer Interaction CSCW2020*.
- 10. Efficient Elicitation Approaches to Estimate Collective Crowd Answers

 John Joon Young Chung, Jean Y. Song, Sindhu Kutty, Sungsoo Hong, Juho Kim, and Walter S.

 Lasecki. In *Proceedings of the ACM on Human-Computer Interaction CSCW2019* (acceptance rate: 31%)
 - **Honorable Mention Award (top 5%)**

Doctoral Consortium

1. Artistic User Expressions in AI-powered Creativity Support Tools

John Joon Young Chung. In Adjunct Publication of UIST2022: ACM Symposium on User Interface

Software and Technology.

Extended Abstracts: Posters, Workshops, and Demos

- 1. TaleBrush: Visual Sketching of Story Generation with Pretrained Language Models

 John Joon Young Chung, Wooseok Kim, Kang Min Yoo, Hwaran Lee, Eytan, Adar, and Minsuk
 Chang. In *Interactivity of CHI 2022: ACM Conference on Human Factors in Computing Systems*(Demo).
- 2. **Gestural Inputs as Control Interaction for Generative Human-AI Co-Creation John Joon Young Chung**, Minsuk Chang, and Eytan Adar. In *3rd Workshop on Human-AI Co-Creation with Generative Models at IUI 2022* (Workshop).
- 3. Towards Instantaneous Recovery From Autonomous System Failures via Predictive Crowdsourcing

John Joon Young Chung, Fuhu Xiao, Nikola Banovic, and Walter S. Lasecki. In *Adjunct Publication* of UIST 2019: ACM Symposium on User Interface Software and Technology (Poster).

- 4. Accident Prevention with Predictive Instantaneous Crowdsourcing John Joon Young Chung, Fuhu Xiao, Nicholas Recker, Kammeran Barnes, Nikola Banovic, and Walter S. Lasecki. *CHI 2019 Workshop on "Looking into the Future: Weaving the Threads of Vehicle Automation"*. (Workshop).
- 5. Exprgram: A Language Learning Interface for Mastering Pragmatic Competence Kyung Je Jo, John Joon Young Chung, and Juho Kim. In *Extended Abstracts of CHI 2018: ACM Conference on Human Factors in Computing Systems.* (Poster).
- Collaborative Crowdsourcing Between Experts and Crowds for Chronological Ordering of Narrative Events
 John Joon Young Chung, Joseph Jay Williams, and Juho Kim. HCI Korea 2018. (Poster).
- 7. Exprgram: A Video-based Language Learning Interface Powered by Learnersourced Video Annotations

Kyung Je Jo, **John Joon Young Chung**, and Juho Kim. *HCOMP 2017 GroupSight*. (Workshop). **Best Paper Runner-Up Award**

INVITED TALKS

TaleBrush: Sketching Stories with Generative Pretrained Language Models SNU AI773 Special Topics in Artificial Intelligence - Deep Learning and Real-world Applications

Artistic User Expressions in AI-powered Creativity Support Tools UNIST CSE333 Intro to HCI JUN., 2022

TaleBrush: Sketching Stories with Generative Pretrained Language Models KAIST AI599 Special Topics in Machine Learning: Deep Learning and Real-world Applications

JUN., 2022

AI-powered Creativity Support Tools for Art-making KAIST CS374 Intro to HCI

JUN., 2021

PRESS COVERAGE

作家とAIが小を共作できるツル主人公の化する運勢を"手書きグラフ"で操作 AIが物語文を作成 (A tool that allows writers and AI to co-create novels. Manipulate the changing fortunes of the protagonist with "handwritten graphs", and AI creates narrative sentences.) ITmedia NEWS JUN., 2022 UM professor combines human, artificial intelligence to make autonomous vehicles safer Michigan Radio MAR., 2019

TEACHING

Teaching Assistant

EXPERIENCE

Human-AI Interaction and Systems (UMich EECS598-003 with Anhong Guo)

Human-Computer Interaction (UMich EECS598-002 with Nikola Banovic)

Fall 2020

Last update: November 21, 2022

ACADEMIC

Organizing Committee

SERVICES

ACM C&C'23 Registration Chair

ACM UIST'22 Program Technology Chair

The First Workshop on Intelligent and Interactive Writing Assistants at ACL2022 Organizer

SIGCHI Korea Local Chapter'18 Local Co-chair

Program Committee

ACM IUI'23

Reviewer

ACM CHI'20-22

ACM CHI LBW'20-22

ACM UIST'20-22

ACM CSCW'18,20-22

ACM DIS'21-22

ACM IUI'22

ACM Creativity&Cognition'21-22

ACM IMWUT'22

ACM MobileHCI'20

IEEE VL/HCC'21

ACM WebConf'20

Student Volunteer

ACM CSCW'20

ACM DIS'21-22

ACM IUI'22