John Joon Young Chung

POSITION & Research Scientist @ Midjourney (Starting September)

CONTACT Email: jjyc@umich.edu

Website: http://johnr0.github.io

RESEARCH INTERESTS Human-Computer Interaction (HCI)+AI/ML, particularly, AI-powered Creativity Support Tools for art-

making and storytelling.

PREVIOUS SpaceCraft Los Angeles, CA
EXPERIENCE Research Engineer FEB. 2023 – AUG. 2023

Microsoft Research Redmond, WA

Research Intern MAY. 2022 – AUG. 2022

Mentor: Saleema Amershi and Ece Kamar

Naver AI Lab Seongnam, Korea

Research Intern MAY. 2021 – SEP. 2021

Mentor: Minsuk Chang

Adobe Research Seattle, WA

Research Intern at Creative Intelligence Lab MAY. 2020 – AUG. 2020

Mentor: Rubaiat Habib

Kixlab, KAIST Daejeon, Korea

Full-time Researcher Ap. 2017 – Jul. 2018

Mentor: Juho Kim

EDUCATION University of Michigan Ann Arbor, MI

Ph.D. in Computer Science and Engineering SEP. 2018 – JAN. 2023

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

ramined era place from the top among 17 i stadents in own dept

HONORS AND **2019 UTC Outstanding Student of the Year Award**AWARDS

Honorable Mention Award ACM CSCW 2019

2020

2019

Honorable Mention Award ACM CSCW 2019 2019
CSE fellowship (for 1 year) University of Michigan 2018

Best Paper Runner-Up Award HCOMP GroupSight 20172017Graduation Award Alumni Association of College of Engineering, SNU2017

2nd place and a popularity award Information Science and Culture Project Exhibition Awards, SNU

2016
Special Award Appendix Packing P

Special Award Anyang Super Rookie Festival 2016
Encouragement Award Writing in Science & Technology Research Competition, SNU 2015

Encouragement Award Writing in Science & Technology Research Competition, SNU

National Scholarship for Science and Engineering (4 years)

2015

2017

PUBLICATIONS **Published**

- PromptPaint: Steering Text-to-Image Generation Through Paint Medium-like Interactions
 John Joon Young Chung, Eytan Adar. In Proceeding of UIST 2023: The ACM Symposium on User
 Interface Software and Technology.
- 2. 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 *International Conference on Computer Vision ICCV 2023*.
- 3. Leveraging Double-edged Sword: Diversified and Accurate Text Data Generation with Language Models and Human Interventions

John Joon Young Chung, Ece Kamar, Saleema Amershi. In the 61st Annual Meeting of the Association for Computational Linguistics - ACL 2023 (acceptance rate: 22%).

- 4. Artinter: AI-powered Boundary Objects for Commissioning Visual Arts
 John Joon Young Chung, Eytan Adear. In *Proceedings of DIS 2023: ACM Conference on Designing Interactive Systems* (acceptance rate: 24%).
- 5. 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%).
- 6. 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%).
- 7. 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%).
- 8. **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 CSCW 2021.
- 10. 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%).
- 11. 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%).
- 12. 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%).
- 13. 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*.
- 14. 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%)

Arxiv preprint

1. viz2viz: Prompt-driven Stylized Visualization Generation using a Diffusion Model Jiaqi Wu, John Joon Young Chung, Eytan Adar.

Doctoral Symposium

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

John Joon Young Chung. In Adjunct Publication of UIST 2022: ACM Symposium on User Interface

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).
- 6. 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**

Magazine Articles

- Designing AI-powered Art-making Tools
 John Joon Young Chung. In XRDS: Crossroads, The ACM Magazine for Students, Summer, 2023
- 2. 문학과 인공지능 작가와 독자 간 매개로서의 역할에 대한 기대 (Literature and AI Expecting Roles of Bridging Writers and Readers)
 John Joon Young Chung, Taewook Kim. In 시인수첩 (계간): 여름호 2023년 (The Poet's Notebook (A Quarterly Journal): Summer, 2023).

INVITED TALKS

TaleBrush: Sketching Stories with Generative Pretrained Language Models SNU AI773 Special Topics in Artificial Intelligence - Deep Learning and Real-world Applications JUN., 2022

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

Summer 2022 aiXdesign Asian POV (Asian Point of View) aiXdesign DEC., 2022 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 EXPERIENCE

Teaching Assistant

Human-AI Interaction and Systems (UMich EECS598-003 with Anhong Guo)	Winter 2022
Human-Computer Interaction (UMich EECS598-002 with Nikola Banovic)	Fall 2020

ACADEMIC

Organizing Committee

SERVICES ACM C&C'23-24 Registration Chair

The Second Workshop on Intelligent and Interactive Writing Assistants at CHI2023 Organizer

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

Reviewer

ACM CHI'20-23 (Outstanding Review × 3)

ACM CHI LBW'20-23

ACM UIST'20-23 (Outstanding Review × 1)

ACM CSCW'18,20-23

ACM DIS'21-23

ACM IUI'22-23 (Outstanding Review × 2)

ACM Creativity&Cognition'21-22 (Outstanding Review × 1)

ACM IMWUT'22

ACM MobileHCI'20

IEEE VIS'23 (Outstanding Review × 1)

IEEE VL/HCC'21 (Outstanding Review × 1)

ACM WebConf'20

Student Volunteer

ACM CSCW'20 ACM DIS'21-22 ACM IUI'22

Music

Hothead Single — Liberalia (Band)	2022
영원한 봄 (Eternal Spring) Full length — Solo project	2022
Crave Single — Liberalia (Band)	2018
Reign Over Single — Liberalia (Band)	2016

Last update: July 18, 2023