Yunseok Jang

CONTACT INFORMATION	🏠: yunseokjang.github.io	✉: yunseokj@umich.edu	🔍: Yunseok Jang

RESEARCH INTERESTS

Machine Learning, Multimodal Learning, Generative Models, Large Vision and Language Models

EDUCATION

University of Michigan, Ann Arbor, MI   Sep. 2018 – May 2025
Ph.D., Computer Science and Engineering
Thesis: *Enhancing Video Understanding Through Deep Generative Models and Task Comprehension*
Advisor: Honglak Lee
Committee: Joyce Chai, Justin Johnson, Andrew Owens

Seoul National University, Seoul, Korea   Mar. 2016 – Feb. 2018
M.S., Computer Science and Engineering
Thesis: *Video-based Visual Question Answering with Spatio-Temporal Reasoning Tasks*
Advisor: Gunhee Kim
Committee: Byoung-Tak Zhang, U Kang

KAIST, Daejeon, Korea   Feb. 2007 – Aug. 2015
B.S., Computer Science
Cumulative Rank: **1st** out of 231 students in August 2015

Franklin W. Olin College of Engineering, Needham, MA   Aug. 2008 – May 2009
Exchange Student Program

PUBLICATIONS

Peer-Reviewed Conference Papers:

[C9] **Yunseok Jang***, Yeda Song*, Sungryull Sohn, Lajanugen Logeswaran, Tiange Luo, Dong-Ki Kim, Kyunghoon Bae, Honglak Lee. *"Scalable Video-to-Dataset Generation for Cross-Platform Mobile Agents."* In CVPR, 2025.

[C8] Saelyne Yang, Sunghyun Park, **Yunseok Jang**, Moontae Lee. *"YTCommentQA: Video Question Answerability in Instructional Videos."* In AAAI, 2024. [pdf]

[C7] Lajanugen Logeswaran, Sungryull Sohn, **Yunseok Jang**, Moontae Lee, Honglak Lee. *"Unsupervised Task Graph Generation from Instructional Video Transcripts."* In Findings of ACL (short), 2023. [pdf]

[C6] Michael Miller Yoder, Qinlan Shen, Yansen Wang, Alex Coda, **Yunseok Jang**, Yale Song, Kapil Thadani, Carolyn P. Rose. *"Phans, Stans and Cishets: Self-Presentation Effects on Content Propagation in Tumblr."* In WebSci, 2020. [pdf]

[C5] **Yunseok Jang***, Tianchen Zhao*, Seunghoon Hong, Honglak Lee. *"Adversarial Defense via Learning to Generate Diverse Attacks."* In ICCV, 2019. [pdf]

[C4] Dingdong Yang*, Seunghoon Hong*, **Yunseok Jang**, Tianchen Zhao, Honglak Lee. *"Diversity-Sensitive Conditional Generative Adversarial Networks."* In ICLR, 2019. [pdf]

[C3] **Yunseok Jang**, Gunhee Kim, Yale Song. *"Video Prediction with Appearance and Motion Conditions."* In ICML, 2018. [pdf]

[C2] Joon-Mo Park, Chul-joo Lee, **Yunseok Jang**. *"Theory-driven automated content analysis of suicidal tweets : Using typicality-based classification for LDA dataset."* In ICA, 2018. [pdf]

[C1] **Yunseok Jang**, Yale Song, Youngjae Yu, Youngjin Kim, Gunhee Kim. *"TGIF-QA: Toward Spatio-Temporal Reasoning in Visual Question Answering."* In CVPR, 2017 (**Spotlight**). [pdf]

Peer-Reviewed Workshop Papers:

[W3] **Yunseok Jang***, Yeda Song*, Sungryull Sohn, Lajanugen Logeswaran, Tiange Luo, Honglak Lee. *"Mobile OS Task Procedure Extraction from YouTube."* In NeurIPS First Workshop on Video-Language Models, 2024. [pdf]

[W2] **Yunseok Jang***, Sungryull Sohn*, Lajanugen Logeswaran, Tiange Luo, Moontae Lee, Honglak Lee. *"Multimodal Subtask Graph Generation from Instructional Videos."* In ICLR First Workshop on Multimodal Representation Learning, 2023. [pdf]

[W1] **Yunseok Jang**, Ruben Villegas, Jimei Yang, Duygu Ceylan, Xin Sun, Honglak Lee. *"RiCS: A 2D Self-Occlusion Map for Harmonizing Volumetric Objects."* In CVPR AI for Content Creation Workshop, 2022 (**Oral**, **Best Paper - Runner Up**). [pdf]

Peer-Reviewed Journal:

[J1] **Yunseok Jang**, Yale Song, Chris Dongjoo Kim, Youngjae Yu, Youngjin Kim, Gunhee Kim. *"Video Question Answering with Spatio-Temporal Reasoning."* IJCV, 2019. [pdf]

Technical Report:

[T1] **Yunseok Jang**, Yale Song, Gunhee Kim. *"On the Virality of Animated GIFs on Tumblr."* arXiv:2108.07894, 2021. [pdf]

PROFESSIONAL EXPERIENCE	**University of Michigan**, Ann Arbor, MI Graduate Student Research Assistant Advisor: Honglak Lee	Sep. 2018 – Dec. 2024
	LG AI Research, Ann Arbor, MI Research Intern Collaborators: Sungryull Sohn, Lajanugen Logeswaran, Saelyne Yang, Sunghyun Park, Moontae Lee	Nov. 2021 – May 2023
	Adobe Research, San Jose, CA Research Intern Collaborators: Ruben Villegas, Duygu Ceylan, Jimei Yang, Xin Sun	Jun. 2020 – Nov. 2020
	Google, Mountain View, CA Research Intern Collaborators: Will Lu, Lu Jiang	Jun. 2019 – Dec. 2019
	University of Michigan, Ann Arbor, MI Visiting Scholar Advisor: Honglak Lee	Mar. 2018 – Jun. 2018
	Yahoo! Research, New York, NY Research Intern Collaborator: Yale Song	Jun. 2017 – Nov. 2017
	Seoul National University, Seoul, Korea Graduate Student Research Assistant Advisor: Gunhee Kim Collaborator: Yale Song (under Yahoo Academic Research Program)	Sep. 2015 – Feb. 2018
	KAIST, Daejeon, Korea Undergraduate Research Assistant Advisor: Alice Oh	Mar. 2015 – Jun. 2015

KAKAO, Gyeonggi-do, Korea   Sep. 2012 – Jul. 2014
Software Engineer (iOS and Backend)

ESTsoft, Seoul, Korea   Jan. 2011 – Aug. 2012
Software Engineer (Android and Windows)

Helsinki Metropolia University of Applied Sciences, Espoo, Finland Jun. 2010 – Aug. 2010
Software Engineer Intern (Embedded System)

KAKAO, Seoul, Korea   Jul. 2009 – Dec. 2009
Software Engineer Intern (Network System)

ACADEMIC EXPERIENCE	**University of Michigan**, Ann Arbor, MI	
	Graduate Student Instructor, EECS281 Data Structures and Algorithms	Fall 2024
	Graduate Student Instructor, EECS545 Machine Learning	Winter 2024
	Graduate Student Instructor, EECS545 Machine Learning	Winter 2023
	Graduate Student Instructor, EECS498/598 Deep Learning for Computer Vision	Fall 2020
	Graduate Student Instructor, EECS498/598 Deep Learning for Computer Vision	Fall 2019

Seoul National University, Seoul, Korea
Grader, M1522.001000 Computer Vision   Spring 2017
Teaching Assistant, 4190.101 Discrete Mathematics   Spring 2016
Grader, 4190.773 Probabilistic Graphical Models   Fall 2015

KAIST, Daejeon, Korea
Teaching Assistant, CS101 Introduction to Programming   Spring 2015
Teaching Assistant, CS408 Computer Science Project   Spring 2013

PROFESSIONAL ACTIVITIES

ICML Workshop Workflow Manager (2019)

Journal Reviewer: IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), Journal of Machine Learning Research (JMLR)

Conference Reviewer: CVPR (2019–2025), ICCV/ECCV (2019–2023), ICLR (2020–2024), ICML (2021–2023), NeurIPS (2020–2023), AAAI (2021), ICMI (2016–2018)

Workshop Reviewer: MRL (2023), AICC (2022), LUV (2019, 2021), AdvMLCV (2019)

HONORS AND AWARDS

Recipient of OpenAI Researcher Access Program   Jul. 2024 – Dec. 2024

Recipient of Kwanjeong Graduate Student Scholarship Program   Jul. 2018 – Dec. 2023

CVPR 2022 AI for Content Creation Workshop Best Paper - Runner Up Award   Jun. 2022

Outstanding Graduate Student Instructor Award in University of Michigan CSE   Jul. 2021

ICML 2021 Best Reviewer Award   Jul. 2021

ECCV 2020 Outstanding Reviewer Award (co-listed as one of the top 12 reviewers) Aug. 2020

Best Thesis Award in SNU CSE   Feb. 2018

Recipient of KFAS Graduate Student Scholarship Program   Mar. 2016 – Feb. 2018

Preparatory Association Award for the highest GPA in KAIST   Feb. 2016

Recipient of Fulbright & GE Foundation Scholar Leaders Program   Jun. 2008 – Aug. 2015

LEADERSHIP
ROLES AND
ACTIVITIES

Organizer of Experience-Sharing Events for CS Candidates   Dec. 2012, Mar. 2013, Aug. 2018
Links: http://bit.ly/121208_kaistcs, http://bit.ly/130323_kaistcs, http://bit.ly/180718_snuml

Member of KAIST Mobile Application Development Group (Team Include)   Feb. 2010 – Aug. 2015

Member of the Undergraduate Students' Association in KAIST   Feb. 2007 – Jun. 2008

Magician (Division: Stage and Manipulation)   Dec. 2002 – May 2005

SKILLS

Computer:

Deep Learning Libraries: PyTorch, TensorFlow
Database-related Systems: Apache Pig/Hive, Redis, MariaDB, MySQL
Server-Side Development (Distributed System Design, System Engineering)
Programming Languages: JAVA, Python, C/C++, Ruby (Jekyll), Scala
Mobile Application Development (iOS, Android), Applied Algorithms

Languages:

Korean (Native), English (Fluent), Chinese (Basic)