

Daeheon Jeong

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Daejeon, South Korea

Interests Human-AI Collaboration, Knowledge Work, Collective Intelligence, AI Alignment.

Education **KAIST**, Kim Jaechul Graduate School of AI Daejeon, Republic of Korea
M.S. in Artificial Intelligence (4.10/4.30) Sep 2024 – Present

Sogang University, College of Economics Seoul, Republic of Korea
Bachelor of Economics (*Summa Cum Laude*, 1st of 96, 4.11/4.30) Mar 2020 – Feb 2024
– Harvard Summer School, Cambridge, MA Jun – Aug 2022

Publications **Conference Papers**

[C1] **CANVAS: A Benchmark for Vision-Language Models on Tool-Based User Interface Design**

Daeheon Jeong*, Seoyeon Byun*, Kihoon Son, Dae Hyun Kim, Juho Kim. *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*, 2026 (to appear). Acceptance rate: 17.6%. [Link]

[C2] **PlanTogether: Facilitating AI Application Planning Using Information Graphs and Large Language Models**

Dae Hyun Kim*, Daeheon Jeong*, Shakhnozakhon Yadgarova, Hyungyu Shin, Jinho Son, Hariharan Subramonyam, Juho Kim. *Proceedings of the CHI Conference on Human Factors in Computing (CHI)*, 2025. Acceptance rate: 24.9%. [Link]

Posters, Demos, and Workshops

[D1] **Visual Embedding of Screen Sequences for User-Flow Search in Example-driven Communication**

Daeheon Jeong* and Hye Hyun Chu*. *Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA)*, 2025. Acceptance rate: 32.83%. [Link]

[D2] **Auditory Map Generation Using Boundary Detection in a Web Environment**

Daeheon Jeong, Florian Reuting, Hwanki Jeong. *Proceedings of the HCI Society of Korea Conference (HCI Korea)*, 2022 (Best Paper). [Link]

[D3] **Spatial Screen Reader Using Touch Interface for Visually Impaired**

Daeheon Jeong, Yonghyun Kim, Jongha Park, Myungjae Cho. *Proceedings of the Korea Computer Congress (KCC)*, 2022. [Link]

Research in Progress [R1] **Interactive Learning of Domain Knowledge from Expert Demonstrations**

In preparation. Investigating how foundation models learn domain-specific knowledge by observing expert task execution and asking clarifying questions. (Co-leading)

[R2] **Team-Level Foundation Model Alignment with Collective Knowledge**

In preparation. Exploring how teams can collaboratively build and organize collective knowledge to align foundation models with team-level preferences. (Co-leading)

[R3] **Design System for Generative User Interface**

In preparation. Developing an evaluation framework for a UI generation model to assess alignment with organizational design guidelines. (Contributing, with SAMSUNG DESIGN OFFICE)

Research Experience	KIXLAB, School of Computing, KAIST	Dec 2023 – Present
	Student Researcher Advisors: Prof. Juho Kim, Prof. Dae Hyun Kim.	
	– AI Application Planning Support System (ALGORITHM LABS) Developed an expert support system for AI application planning. Implemented a real-time reasoning graph with <i>Graphology</i> and conducted focus group evaluation [C2].	
	– Scalable Heuristic Evaluation with LLM (SAMSUNG CX INSIGHT) Evaluated LLM capabilities for organizational UX workflow support through task analysis. Trained a multi-head attention pooler with <i>DinoV2</i> backbone for intent-based design retrieval [D1].	
	– Defense AI Training Program (KOREA MINISTRY OF DEFENSE) Mentored military officers on legal retrieval systems research, contributing to a legal hierarchy-preserving indexing pipeline using <i>FAISS</i> .	
	Lifestyle Media Group, Art & Technology, Sogang University	Jan 2022 – Apr 2024
	Student Researcher Advisor: Prof. Yongsoon Choi.	
	– Conversational Audio Guide for Museum Interviewed museum docents to identify pedagogical dialogue strategies. Designed a graph-based dialogue system with <i>Neo4j</i> and <i>NetworkX</i> for topic navigation and user modeling [P2].	
	Naver Labs, Naver Corporation	Jun – Dec 2023
	Research Engineer Intern Advisors: Prof. Giseop Kim, Dr. Sunwook Choi.	
	– Monitoring Interface for Autonomous Vehicle Developed a positional uncertainty monitoring interface for remote operators. Designed <i>Markov Chain</i> visualization on an interactive map using <i>ROS</i> and <i>WebGL</i> [P1].	
Honors and Scholarships	Student Research Grant , Center for Convergence Education	Sep 2022 – Jun 2023
	Early-Stage Startup Grant , Yonsei Enterprise Support Foundation	Mar 2023
	Alumni Scholarship , Sogang Alumni Foundation	Jun 2020 – Dec 2022
	Study Abroad Scholarship , DB Kim Joon-Ki Cultural Foundation	Jun – Aug 2022
	Creative Award , HCI Korea	Feb 2022
	Dean's List , Sogang University	Jun 2020, Dec 2021
Patents	[P1] Method and System for Providing a Visualization Interface to Monitor the Location of Autonomous Vehicles Sunwook Choi, Giseop Kim, <u>Daeheon Jeong</u> . <i>K.R. Patent 10-2024-0042061</i> , Oct 2025. [Link]	
	[P2] Exhibit Information Guide Device and Method Yongsoon Choi, Daeheon Jeong, Junki Min, Changhee Cho, Dongjun Lim, Siwon Jeon. <i>K.R. Patent 10-2024-0031793</i> , Sep 2025. [Link]	
Service and Activities	Academic Reviewer , CHI (2024, 2025), AAAI (2025), DIS (2025), HRI (2024)	
	Participating Artist , Artience Program, Daejeon Arts Foundation	Mar 2025 – Present
	Invited Speaker , Samsung Electronics (Usability Evaluation Methods Using LLM)	Sep 2024
	Software Engineer Intern , Naver Financial, Naver Corporation	Jan – Mar 2023
	Military Police , 15th Special Missions Wing, Republic of Korea Air Force	Mar 2018 – Feb 2020
Skills	Research Methods : User Interview, Task Analysis, Focus Group Study, Thematic Coding	
	ML/AI : Python, PyTorch, LLM, Reward Modeling, Agent Design, Human Evaluation	
	Systems/Tools : React.js, WebGL, ROS, Neo4j, Selenium, Figma, DaVinci Resolve	