

DAWON LEE

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WORK EXPERIENCE

Korea Advanced Institute of Science and Technology

Postdoctoral Researcher

Sep. 2024 – Present

Daejeon, South Korea

Google News Lab Fellowship

Fellow

Dec. 2016 – Feb. 2017

Seoul, South Korea

EDUCATION

Korea Advanced Institute of Science and Technology

Aug. 2024

Ph.D. in Graduate School of Culture Technology

Daejeon, South Korea

Advisor: Prof. Junyong Noh

Korea Advanced Institute of Science and Technology

Aug. 2019

M.S. in Graduate School of Culture Technology

Daejeon, South Korea

Advisor: Prof. Junyong Noh

Lillehammer University

Fall 2015

Exchange Student

Lillehammer, Norway

Pusan National University

Aug. 2017

Bachelor of Design&Technology

Busan, South Korea

RESEARCH INTERESTS

Human-Computer Interaction (HCI), Computer Graphics (CG), Multimedia

Keywords: Content Technology, Computational Interaction, Video Editing, Understanding User, Image Processing

PUBLICATIONS

Generating Highlight Videos of a User-Specified Length using Most Replayed Data

Minsun Kim, **Dawon Lee***, Junyong Noh* (*Co-corresponding author)

CHI 2025

Project Page: <https://w-dlee.github.io/highlights>

OptiSub: Optimizing Video Subtitle Presentation for Varied Display and Font Sizes via Speech Pause-Driven Chunking

Dawon Lee, Jongwoo Choi, Junyong Noh

CHI 2025

Project Page: <https://w-dlee.github.io/optisub>

User Performance in Consecutive Temporal Pointing: An Exploratory Study

Dawon Lee, Sunjun Kim, Junyong Noh, Byungjoo Lee

CHI 2024

Project Page: <https://w-dlee.github.io/ctp>

PopStage: The Generation of Stage Cross-Editing Video Based on Spatio-Temporal Matching

Dawon Lee, Jung Eun Yoo, Kyungmin Cho, Bumki Kim, Gyeonghun Im, Junyong Noh

Transactions on Graphics (TOG), presented at SIGGRAPH Asia 2022

Project Page: <https://w-dlee.github.io/popstage>

Virtual Camera Layout Generation using A Reference Video

Jung Eun Yoo, Kwanggyoon Seo, Sanghun Park, Jaedong Kim, **Dawon Lee**, Junyong Noh

CHI 2021

Project Page: <https://vml.kaist.ac.kr/main/international/individual/173>

Cinematography Generation using a Reference Video

Kwanggyoon Seo, Sanghun Park, Jung Eun Yoo, Jaedong Kim, **Dawon Lee**, Junyong Noh
Pacific Graphics 2019 Poster

PATENTS

* Patent Registration (US)

Method and Apparatus for Framing Three Dimensional Target Object for Virtual Camera Layout

* Patent Application (US)

Apparatus for Generating Cross-Edited Video and Method of Operating the Apparatus

* Patent Registration (KR)

Method and Apparatus for Reproducing Camera Work

Method and Apparatus for Image Processing Based on Artificial Neural Network

Method and Apparatus for 3D Target Object Framing to Generate Virtual Camera Layout

* Patent Application (KR)

Method and Apparatus for Providing Subtitles for a Video

Method and Apparatus for Generating Highlight Video

Apparatus for Generating Cross-Edited Video and Method of Operating the Apparatus

FUNDED PROJECTS

* Project Leader

Optimized Short-Form Video Generation Based on User-Specified Length and Subtitle Font Size (2024 – 2026)

Funding: National Research Foundation of Korea (NRF)

* Research Assistant

Development of Self-Evolving AI Creation Platform (2020 – 2022)

Funding: Korea Creative Content Agency (KOCCA)

Optimization of Real-Time Video Game Mechanics: Perspectives on Player Immersion and Agency (2020 – 2021)

Funding: National Research Foundation of Korea (NRF)

Development of Senior Game Play Support Technology and Game Service Model (2019 – 2021)

Funding: Korea Creative Content Agency (KOCCA)

Development of Camera Work Tracking Technology for Animation Production using Artificial Intelligence (2018 – 2019)

Funding: Korea Creative Content Agency (KOCCA)

TECHNOLOGY TRANSFER

AI-based Reference Video Camera Work Learning and Animation Camera Directing System

AWARD

Honorable Mention of Young Researcher Award

Jul. 10, 2025

Korea Computer Graphics Society (KCGS)

INVITED TALKS

Soongsil University

Dec. 2, 2025

Guest Lecture in an HCI Course (hosted by Prof. Jungjin Lee)

NAVER

Feb. 12, 2025

Tech Talk (hosted by Dr. Young-Ho Kim, NAVER AI Lab)

Pusan National University

Nov. 19, 2024

Special Lecture on Software Convergence (hosted by Prof. Chulki Kim)

Korea Computer Graphics Society (KCGS)

Jul. 10, 2024

Outstanding International Conference Paper Presentation

KBS AX (AI Transformation) Day

Dec. 8, 2023

<https://www.yna.co.kr/view/AKR20231206143700005>

KBS Media Technology Research Institute

Nov. 30, 2023

TEACHING EXPERIENCE

* Teaching Assistant

GCT742 Topics in Game: Innovative Game Design Project

Fall 2021

GCT547 Dynamics of Human-Computer Interaction

Fall 2019

MENTORSHIP

Minsun Kim (KAIST GSCT, M.S.)

May 2024 – Present

Supervised a research project on video editing

→ Under revision

Supervised research on "Generating Highlight Videos of a User-Specified Length using Most Replayed Data"

→ Published in CHI 2025 (Corresponding author)