

DAEUN HWANG

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daeunhwang.com/researches

FIELDS OF INTERESTS

Human-Computer Interaction, Creative Technologies, Serious Games, Digital Game-Based Learning, Music

EDUCATION

University of California Santa Cruz, United States

Sept. 2023 - Present

Ph.D. in Computational Media

GPA: 4.0/4.0. Co-advised by Dr. Edward F. Melcer and Dr. Katherine Isbister.

Yonsei University, South Korea

Mar. 2018 - June. 2023

Bachelor of Science, Information & Interaction Design / Micro-major in Computer Programming

GPA: 4.06/4.5.

PUBLICATIONS

Journal Articles

- Liang, Z., Melcer, E., Khotchasing, K., Chen, S., **Hwang, D.**, & Hoang, N. H. (2024). The Role of Relevance in Shaping Perceptions of Sleep Hygiene Games Among University Students: Mixed Methods Study. *JMIR Serious Games*, 12, e64063. <https://doi.org/10.2196/64063>
- Ryu, H., Bang, H., **Hwang, D.**, & Kang, Y. (2023). Exploring the Extent of Usability for Augmented Profile Interfaces in Enhancing Conversation Experiences. *Interacting with Computers 2023*. <https://doi.org/10.1093/iwc/iwad045>
- **Hwang, D.**, & Kang, Y. (2023). How Does Constructive Feedback in an Educational Game Sound to Children?. *International Journal of Child-Computer Interaction*, 36, 100581. <https://doi.org/10.1016/j.ijcci.2023.100581>

Conference Papers

- **Hwang, D.**, & Melcer, E. F. (2024). Mindfulness Techniques Taught Through Game Mechanics. *In Companion Proceedings of the 2024 Annual Symposium on Computer-Human Interaction in Play*. (pp. 300-305). <https://doi.org/10.1145/3665463.3678839>
- **Hwang, D.**, & Melcer, E. F. (2024). Exploring engagement in Idle Game Design. *2024 IEEE Conference on Games (CoG)*, 1–8. <https://doi.org/10.1109/cog60054.2024.10645671>
- **Hwang, D.**, & Park, S. (2023). EMO100DB: An Open Dataset of Improvised Songs with Emotion Data. *International Conference of Music Perception and Cognition 2023*.
- **Hwang, D.**, Oh, S., & Jun, S. (2022). Does Interactive Media Art Engage an Audience More Than Non-Interactive One Does?. *KSDS 2022 Conference Proceeding*, 220-221.
- **Hwang, D.**, Choi, M., Jung, H., Baek, Y. J., Lee, H. B., Lee, Y., Ho, J., Lee, J., & Jun, S. (2022). Meari: Interactive Smart Screen Designed to Tailor Personal Hiking Routes. *KSDS 2022 Conference Proceeding*, 262-263.
- **Hwang, D.**, Chung, Y. J., Yoo, Y. M., Jun, S., & Holoubek, T. (2020). Sbin: Smart, Interactive and IoT-Based Rotating Garbage Classifying Bin. *KSDS 2020 Conference Proceeding*, 172-173.

Poster Presentations

- **Hwang, D.**, & Hwang, H. Understanding Human Perception of Music Plagiarism Through a Computational Approach. Poster presented at: *25th Conference of the International Society for Music Information Retrieval (ISMIR)*; Nov. 17, 2024; San Francisco, CA. (Upcoming)
- **Hwang, D.**, X, Cai, E. Melcer, & E. Carstendottir. (2024). A Music Information Retrieval Approach to Classify Sub-genres in Role Playing Games. Poster presented at: *25th Conference of the International Society for Music Information Retrieval (ISMIR)*; Nov. 17, 2024; San Francisco, CA. (Upcoming)

RESEARCH EXPERIENCE

Enhancing Coastal Climate Resilience using Applied Technology

June 2024 - Present

Advisor: Prof. Katherine Isbister, Dr. Linda Hirsch

- Conducted theory-based coding for the analysis of expert interviews
- Created sketches to support ideation and solution design development

Academical: A Choice-Based Interactive Storytelling Game for RCR

Apr. 2024 - Present

Advisor: Prof. Edward Melcer, Prof. Noah Wardrip-Fruin, Prof. Michael Mateas

- Conducted experimental studies comparing AI-integrated and non AI-integrated versions of interactive storytelling game.
- Created character sprites for the dynamic version of the narrative game.

Gamifying Sleep Health / ALT Games Lab & KUAS' Ubicomp Lab

Oct. 2023 - Present

Advisor: Prof. Edward Melcer, Prof. Zilu Liang

- Led design ideation process for sleep-aiding pet game and building Japanese town game.
- Participated in research for sleep hygiene gamifications

Development of Servitization on Smart Air Clean System Airbot Airblock using Acoustic Waves and Clean Plasma Technology / Korea Air Industry Promotion Association

Oct. 2022 - Dec. 2022

Advisor: Prof. Youngh Kang

- Deployed server connection using Firebase and python, to send signals indicating different scenarios.
- Conducted usability testing session using the VR device.

Design for Experience Lab / Yonsei University

Mar. 2021 - Aug. 2023

Advisor: Prof. Youngh Kang

- Conducted in-depth interviews, observational studies, and diary studies on user experience in terms of Human-Computer Interaction, collaborating with master's degree students in the Innovation department.

Computational Science and Engineering Lab / Yonsei University

July 2020 - Aug. 2020

Advisor: Prof. Eunjung Lee

- Studied machine learning models using Python and Matlab as a summer research intern.

WORK EXPERIENCE

Incheon Start-up Park

June 2021 - Nov. 2023

UX Researcher

- Led and participated in UX consulting process for 6 different start-up companies.
- Provided strategies for successful overseas launching of the products.
- Conducted various UX research including 5+ field studies, 20+ usability testings, 10+ scenario-based observational studies, 5+ surveys, etc.

**Korea Food for the Hungry International
System Consultant**

July 2021 - Dec. 2021

- Created overall template and structure to record and to keep tracking Objectives and Key Results (OKR) system
- Analyzed co-workers' user experience and overall interaction with the OKR system

DoBrain Inc.

Nov. 2020 - June 2021

Global Marketing Intern

- Achieved 1st quarter OKR of on-boarding first 100 global users through initialization of social media accounts
- Conducted user research (field studies, interviews, observational studies, etc)
- Analyzed daily user funnel using SQL and produced ad creatives which led to 12% increase of the sales

TECHNICAL SKILLS

Programming	Python, CSS, Javascript, mySQL, Java, C++, C#
Adobe	Premiere Pro, Photoshop, Lightroom, InDesign, XD, Illustrator, Audition, After Effects
Other	IBM SPSS Statistics, Figma, Logic Pro, TouchDesigner, Final Cut Pro, P5js

LANGUAGES

Korean	Native, first language
English	Fluent, TOEFL iBT 116/120
Spanish	Fluent, DELE C1 (second-highest level)

TEACHING EXPERIENCE

Teaching Assistant: Rapid Prototyping, University of California Santa Cruz	<i>Sept. 2024 - Present</i>
Teaching Assistant: Foundations of Video Game Design, University of California Santa Cruz	<i>Sept. 2023 - Dec. 2023</i>
Special Lecturer: Social Innovation Lecture - <i>Innovation Isn't Too Far From Us</i>	<i>May 2022</i>
Mentor: Social Innovation Mentoring with Youth, Institute for Higher Education	<i>April 2022 - Aug. 2022</i>
Teaching Assistant: User Experience and Research Methods Course, Yonsei University	<i>Sept. 2021 - Dec. 2021</i>
Solution Design Teaching Assistant: Career Exploration Program, Incheon Office of Education	<i>Sept. 2021</i>
Teaching Assistant: UNOSD 5th SDGs Youth Summer Camp	<i>Aug. 2021</i>
Teaching Assistant: Programming for Integrated Science and Engineering, Yonsei University	<i>Sept. 2020 - Dec. 2020</i>
Operator : Social Engagement Mentoring Camp, Yonsei University	<i>July 2019</i>
Mentor: Creative Problem Solving Camp	<i>July 2018 - Aug. 2018</i>

AWARDS AND ACKNOWLEDGEMENTS

High Honors (top 3% of the students in their respective field of study), <i>Yonsei University</i>	<i>June 2022</i>
The Great Challenge Global Korean Youth Video Gold Prize, <i>MBC & YMCA</i>	<i>Oct. 2021</i>
Social Innovation Ambassador, <i>Institute for Higher Education</i>	<i>Sept. 2021</i>
Honors (top 10% of the students in their respective field of study), <i>Yonsei University</i>	<i>June 2021</i>
Grand Prize Designer, <i>Yonsei Merchandise Society</i>	<i>June 2021</i>
Innovation Light-up 1st Scholarship Holder, <i>Institute for Higher Education</i>	<i>Sept. 2020</i>
Dooeul 21st Scholarship Holder, <i>Dooeul Scholarship Foundation</i>	<i>Oct. 2018</i>

VOLUNTEER ACTIVITIES

CSCW 2022 Student Volunteer	<i>Nov. 2022</i>
UIST 2022 Student Volunteer	<i>Nov. 2022</i>
IUI 2022 Student Volunteer	<i>Mar. 2022</i>
Buan English Camp Mentor	<i>July 2019 - Aug. 2019</i>
Dongshimwon (Center for children with disabilities) Volunteer	<i>Mar. 2019 - June 2019</i>
Korea Food for the Hungry International Sponsor Letter Translator (Spanish - Korean)	<i>Sept. 2018 - Jan. 2019</i>
Mapo Community Rehabilitation Center Family Camp Volunteer	<i>July 2018</i>

CERTIFICATES

Career Essentials in Generative AI by Microsoft and LinkedIn, <i>Microsoft</i>	<i>June 2024</i>
Programming Foundations: Beyond the Fundamentals, <i>LinkedIn</i>	<i>June 2024</i>
Project Management Foundations: Requirements, <i>LinkedIn</i>	<i>June 2024</i>
Responsible Conduct of Research for Engineers, <i>CITI Program</i>	<i>May 2024</i>
International Research, <i>CITI Program</i>	<i>May 2024</i>