



Hyun-Kyung LEE

Professor, Underwood International College, Yonsei University
Division of Culture and Design Management

Area of Specialization: Design Thinking, Design & Museum Management with AI

Address: Veritas Hall B 417, 50 Yonsei-ro, Seodaemun-gu, Seoul, Republic of Korea
Tel: +82-10-7277-4189 Email: hyunkyunglee@yonsei.ac.kr

Education

- 2007 Ph.D. Arts Administration, Florida State University, USA
- 2004 M.A. Museum Studies, Syracuse University, USA
- 2000 B.F.A. Visual Communication Design, Hongik University, Korea
- 1996 Diploma, Seoul Arts High School, Korea



경력(Work Experience)

- 2019.09-Present Professor, Yonsei University
 - 2025 UCL-Yonsei Joint Research: AI and Inclusion in Museums
 - Yonsei Institute for AI Innovation project: AI in Global Museums
 - 2025 NRF International Mobility Research: Cultural Rights and AI for All
 - Member, BK21 Innovative Design Education and Research Group
 - Master Planner and Chair, Seoul Design International Forum 2024
 - Panelist and Chair, GEEF 2023
 - Researcher, NRF NCRC interdisciplinary project Science Walden (2015-2022)
 - NRF Mid-Career Research: AI-Based Exhibition Planning
 - Research on the National Design Museum operating model
 - Member, Seoul Public Art Review Committee (2023-2025)
- 2014. 01-2019.08 Assistant/Associate Professor, UNIST
 - NRF Science-Technology-Humanities Convergence Research (science exhibitions)
 - University-linked Story Market Project, Sinjeong Traditional Market
 - Public Service Design Project, Sinjeong Traditional Market
 - Traditional Market Public Service Design Project, Ulju Foundation
 - Storefront/POP Design Project, Eonyang Alps Market
- 2008. 07-2009. 10 Research Professor, ArtCenter College of Design, USA
- 2007. 09-2008. 06 Postdoctoral Researcher, J. Paul Getty Museum, USA
- 2004. 08-2005. 10 Assistant Curator, FSU Museum of Fine Arts, USA
- 2006. 03-2006. 08 Researcher, Cooper Hewitt Smithsonian Design Museum, USA
- 2002. 08-2004. 05 Assistant Curator, Syracuse University Design Gallery, USA
- 2003. 07-2003. 08 Intern, Orange County Museum of Art, USA
- 2003. 05-2003. 06 Intern, National Museum of Modern and Contemporary Art Korea
- 2000. 01-2002. 07 GUI Designer, LG Electronics Design Research Center



Courses Taught

Introduction to Culture and Design Management, Design Management, Design & City in Culture, Culture and Design Trends, Contemporary Topics in Cultural Industry, Creative Technology for Social Innovation, Design Innovation: Safety for Children, Child and Family Issues & Social Design 2, Academic-Industry Project, Design Thinking, Social Innovation for Sustainability, Creative Thinking and Visualization, Design and Prototyping

· Books



Design Museum, Here. Ahn Graphics (2016). Selected for the 2016 Sejong Books.
Design Museum Management. English-language book (2009). ISBN 978-3-639-13674-6.
<Futures> co-authored. Gwangju Design Center Foundation. (2017) ISBN: 979-11-86874-06-6
Book chapter in *Basic Design Textbook.* Ahn Graphics (2015).

Selected International Publications

1. Lee, H. K. & Lou, J. (2025), A Preliminary Exploration of Chinese Digital Nomads' Life and Workstyle. *IAFOR Journal of Cultural Studies*, 10(1): 105-128. **Scopus**
2. Lee, H. K. & et al. (2025), FluidTrack: Investigating Child-Parent Collaborative Tracking for Pediatric Voiding Dysfunction Management. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)*. Association for Computing Machinery, New York, NY, USA, Article 559, 1–18. <https://doi.org/10.1145/3706598.3713878>. **SCI (BEST PAPER Awarded)**
3. Lee, H. K. & Ranti, C. D. (2024), Exploring student and teacher perspectives on education with technological advancement in Indonesia through Design Thinking in response to COVID-19. *CERN IdeaSquare Journal of Experimental Innovation*. 8:1, 36-42. DOI: 10.23726/cij.2024.1475. **Scopus**
4. Lee, H. K., Kim, M. K. & Lee, M. J. (2023). Exploring the Creative Possibility of a Hybrid Design Thinking Workshop through Finding Solutions for Children's Safety in the Childcare Environment. *Creativity Studies*, 16(2): 740-761. DOI: 10.3846/cs.2023.17030. **Scopus**
5. Lee, H. K., Hong, S., Jo, Y. & Kang, Y. (2023). Interactive Experiential Model: Insights from Shadowing Students' Exhibitory Footprints. *Journal of Museum Education*, 48(2): 92-108. DOI: 10.1080/10598650.2022.2122672. **Scopus**
6. Lee, H. K. & Ranti, C. D. (2023). Design Thinking Approach for Sustainable Hospitality: A Smart Mobile Management System for Indonesia. *Archives of Design Research*, 36(4): 163-191. DOI: 10.15187/adr.2023.11.36.4.163. **Scopus**
7. Lee, H. K. & Park, J. E. (2022). Digital Responsibility Insights from a Cross-Cultural Design Thinking Workshop for Creativity. *Creativity Studies*, 15(2): 451-466. DOI: 10.3846/cs.2022.14063. **Scopus**
8. Lee, H. K. & Park, S. & Lee, Y. (2022). A proposal of Virtual Museum Metaverse Content for the MZ Generation. *Digital Creativity*. DOI: 10.1080/14626268.2022.2063903. **A&HCI**
9. Lee, H. K. & Lee, J. (2022). A Study on the Strategic Collaboration System between Craftspeople and Enterprises for Sustainable Development in the Centre of Creative Metropolitan City. *Archives of Design Research*, 35(4): 73-89. **Scopus**
10. Lee, H. K. et al. (2022). Service Design of Artificial Intelligence Voice Agents as a Guideline for Assisting Independent Toilet Training of Preschool Children. *Archives of Design Research*, 35(3): 81-93. **Scopus**
11. Lee, H. K., Park, E. S., Kim, S., Song, H., Kim, D., Seo, J. H., He, Y., & Lee, H. (2022). Design Fiction as a Convergence and Divergence Tool in the Design Thinking Process- Developing Smart Communication Service for Childcare. *Archives of Design Research*, 35(3): 87-98. **Scopus**
12. Lee, H. K. & Kim, H. J. (2022). Emotions and Colors in a Design Archiving System: Applying AI Technology for Museums. *Applied Sciences*, 12(5): 2467. DOI: 10.3390/app12052467. **SCI**
13. Lee, H. K. et al. (2022). Design Thinking with Appropriate Technology for Improving Social Sustainability: Critical and Comprehensive Criteria. *Journal of Integrated Design and Process Science*, 24(2): 29-51. DOI: 10.3233/JID200012. **SCI**
14. Lee, J. H., Lee, H. K.*, Jeong, D., Lee, J. E., Kim, T. R., & Lee, J. H. (2021). Developing Museum Education Content: AR Blended Learning. *International Journal of Art & Design Education*, 40: 473-491. DOI:10.1111/jade.12352. **SSCI, A&HCI (BEST PAPER Awarded)**
15. Lee, H. K. & Park, J. E. (2021). Designing a New Empathy-Oriented Prototyping Toolkit for the Design Thinking Process: Creativity and Design Sensibility. *International Journal of Art & Design Education*, 40(2): 324-341. DOI: 10.1111/jade.12345. **SSCI, A&HCI**
16. Lee, H. K. & Park, W. (2021). Creative Integration of Design Thinking and Strategic Thinking in a Design Education Framework. *Creativity Studies*, 14(1): 160–174. DOI: 10.3846/cs.2021. **Scopus**
17. Lee, H. K., Choi, S., Kang, M., Lee, Y., Lee, S. A., & Kim, H. K. (2021), Interdisciplinary Service Design Approach to Promote Sustainable Solutions in Social Complexity: Case Study on Korean Elderly Residential Stability during COVID-19. *Applied Sciences*, 11(24): 12009. DOI: 10.3390/app112412009. **SCI**
18. Lee, H. K. (2021). Exhibition Curation on the Influential Usage of Polyhedral in Science, Art and Design. *Turkish Journal of Computer and Mathematics Education*, 12(10): 1014-1024. DOI: 10.17762/turcomat.v12i10.4286. **Scopus**
19. Lee, H. K. (2019). Designing a Waterless Toilet Prototype for Reusable Energy Using a User-Centered Approach and Interviews. *Applied Sciences*, 9(5): 919. doi:10.3390/app9050919. **SCI**

20. Lee, H. K. (2019). Maximizing the Five Senses with Art and Design: Sensorial-Experiential Exhibitions in Trend. *Asia Life Sciences*, 18(3): 1157-1165. **Scopus**
21. Lee, H. K. (2019). Creative Contributions from the Young Generation to Invigorating Traditional Street Markets from a Visual Design Perspective. *The Asian International Journal of Life Sciences*, 18(3): 1075-1084. **Scopus**
22. Lee, H. K. & Bae, J. H. (2019). Communication-oriented Collaborative Methodology for Interdisciplinary Convergence Project. *Asia Life Sciences*, 18(1): 419-427. **Scopus**
23. Lee, H. K. & Bae, J. H. (2019). Feces and Urine Separable Toilet Design for Sustainable Energy Production System. *Asia Life Sciences*, 18(3): 1451-1458. **Scopus**
24. Lee, H. K. & Bae, J. H. (2018), User Health Information Analysis with a Urine and Feces Separable Smart Toilet System. *IEEE ACCESS*, 6(1): 78751-78765. doi:10.1109/ACCESS.2018.2885234. **SCI**
25. Lee, H. K. (2018), Prototyping and Case Study of Sustainable and Ergonomic Toilet Design. *JOURNAL OF ENGINEERING AND APPLIED SCIENCES*, 13(18): 7500-7506. **Scopus**
26. Lee, H. K. (2018), Revitalizing Traditional Street Markets in Rural Korea: Design Thinking and Sense-Making Methodology. *INTERNATIONAL JOURNAL OF ART & DESIGN EDUCATION*, doi:10.1111/jade.12183. **SSCI**
27. Lee, H. K. (2018), Education and Support for Non-Design Major Students Using the Sprint Method in Design Thinking Projects. *ASIA LIFE SCIENCES*, 15(4): 2511-2520. **Scopus**
28. Lee, H. K. (2018), Nature Artists, Design Researchers and Scientists Collaborate on a Resource Scarcity Research Lab that Doubles as a Public Art Installation. *JOURNAL OF ENGINEERING AND APPLIED SCIENCES*, 13(1): 2254-2257. **Scopus**
29. Lee, H. K. (2017), Design Museums Experiencing and Seeking Practicality with Aesthetic Value. *INFORMATION-AN INTERNATIONAL INTERDISCIPLINARY JOURNAL*, 20(10B): 7565-7572. **Scopus**
30. Lee, H. K. (2017), From Sketch to Screen, from Scratch to Competence. *INTERNATIONAL JOURNAL OF ART & DESIGN EDUCATION*, 36: 303-314. doi:10.1111/jade.12160. **SSCI**
31. Lee, H. K. & Jun, S. J. (2017), Social Creativity and Design Thinking: Developing Foundation Courses in Undergraduate Transdisciplinary Design Education. *INFORMATION-AN INTERNATIONAL INTERDISCIPLINARY JOURNAL*, 20(4B): 2647-2654. **Scopus**
32. Lee, H. K. (2017), Recent Strategy & Characteristic of Worldwide Design Museums. *INTERNATIONAL JOURNAL OF ART AND CULTURE TECHNOLOGY*, 1(1): 15-20.
33. Lee, H. K.*, Cho, K. H., Lee, C., Cho, J., Yi, H., Seo, Y., Cho, G., Kwon, Y. N., Lee, C., Paek, K. (2017), Science Walden: Exploring the Convergence of Environmental Technologies with Design and Art. *SUSTAINABILITY*, 9(35): 1-17. doi:10.3390/su9010035. **SCI**
34. Lee, H. K. & Lee, W. H. (2016), The Usability Attributes and Evaluation Measurements of Mobile Media AR. *COGENT ARTS & HUMANITIES*, 3(1): 1-16. doi:10.1080/23311983.2016.1241171. **Scopus**
35. Lee, H. K. & Jun, S. J. (2014), Dialogue and Carnival: Understanding Visitors' Engagement in Design Museums. *DIGITAL CREATIVITY*, 25(3): 247-254. doi.org/10.1080/14626268.2014.904369. **AHCI**
36. Lee, H. K. (2012), Best Mentoring Practices of Design Education at the Design High School Level and Instructional Resources. *JOURNAL OF EDUCATION AND LEARNING*, 1(1): 67-76.
37. Lee, H. K. & Breitenberg, M. (2010), Education in the New Millennium: The Case for Design-Based Learning. *INTERNATIONAL JOURNAL OF ART & DESIGN EDUCATION*, 29(1): 54-60, 2010.02. doi.org/10.1111/j.1476-8070.2010.01631.x. **SSCI**

Exhibition Planning (Curating)

INFINITY_FSM

12. 2018

UNIST Science Walden Cabin

Sinjeong Traditional Market Design Renewal Exhibition

06. 2018

Sinjeong Traditional Market Community Lounge

2017 Gwangju Design Biennale, Official Curator

2017 Design Week_Toilet Exhibition

09.2017

DDP (Dongdaemoon Design Plaza)

Coffee Cup & Café Design

06. 2017

UNIST Community Center

2017 Korea Energy Experience Exhibition

05. 2017

Ulsan Park

Art & Science Media Art

07.2016

UNIST Science Walden Pavilion

UNIST Students' Love to Eon-Yang Market

06.2015

Eon-Yang Alps Gallery

Social Selfies: Constructing Community

10.2015

Florida State University Art Museum

One. Eye. PATI. party

02.07-03.14. 2013

Artclub1563

13 Balls.

11.22.2012-01.22. 2013

Artclub1563

City Rituals: Gestures

09.18-10.23. 2012

Artclub1563

Art on the Wall

06.01-08.31. 2012

Artclub1563

Recoop: my strength in design

08.24-09.06. 2011

Gaia Gallery

Curator

2017 광주디자인비엔날레

Gwangju Design Biennale

Sep. 8 ~ Oct. 23, 2017



Hyun suk Kim(Korea)

Professor of Department of Visual

Communication Design at Hongik

University

Major Experiences

Chief Designer of Min

Yahoo! Design Mana

2002-2006 FIFA Worl

President of the anim

Experience

2015 International De

Permanent Director o

Permanent Director o



Hyun kyung Lee(Korea)

Where Masks Still Dance: New Guinea

12.26. 2009-06.06. 2010

In charge of research, collection report, checklist

The Bowers Museum, Santa Ana, Orange County

The Color of Life

02.01-05.30. 2008

In charge of checklist, extended labels

The Getty Villa, Los Angeles

Pentimenti

04.15-04.16. 2008

In charge of planning a workshop

The Getty Center, The J. Paul Getty Museum, LA

Syracuse sees in the city: Views of New York

01.01-04.01. 2004

In charge of exhibition design, brochure, checklist

Lowe Art Gallery, Syracuse University, New York

Beneath the Banyan Tree: Ritual, Remembrance, and

Storytelling in Performed North Indian Folk Arts

11.01. 2003-01.31. 2004

In charge of exhibition design

Lowe Art Gallery, Syracuse University, New York

PASSAGEWAY-OVERGOING

07.09.-09.12. 2003

In charge of checklist & labeling editing, design

MOCA (Museum of Contemporary Art), Seoul

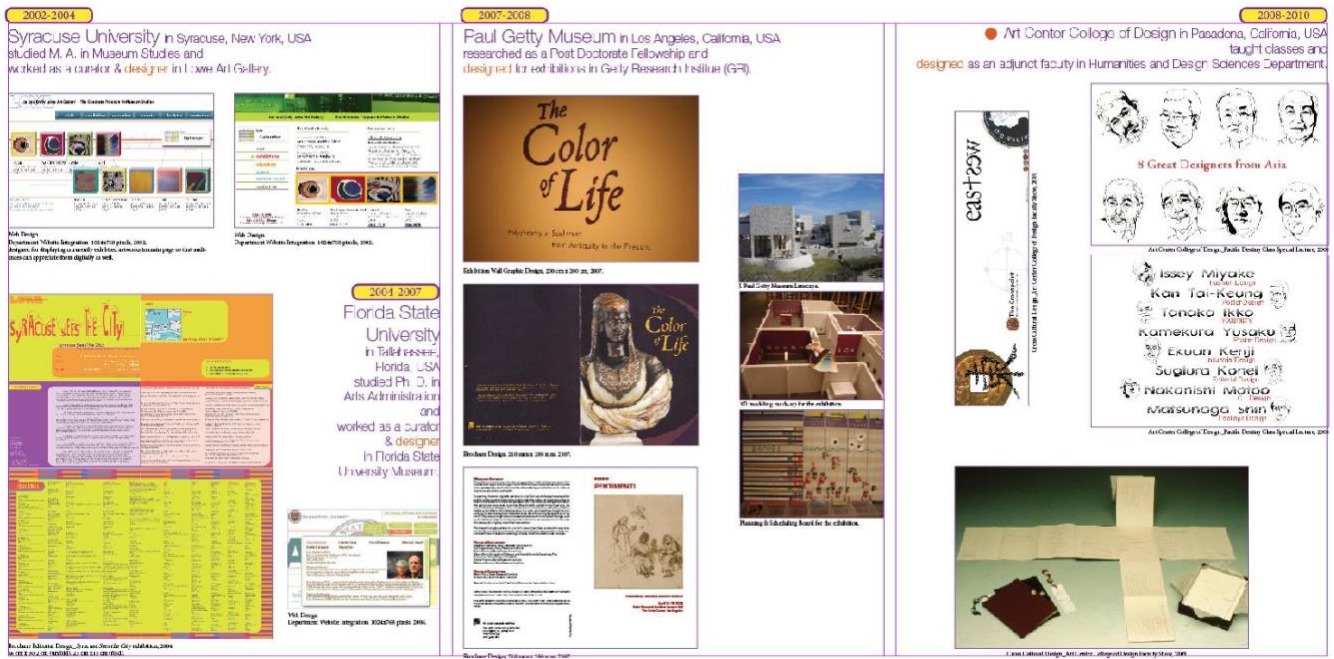
Patent

20+ Patent/Design Registrations

20 International/Domestic Patent Registrations

	Invention / Design	Category	Registration No.	Date
1	Height-Adjustable Waterless Toilet	International Design	DM/097 431	2017-06-30
2	Eco-Friendly Toilet and Waste Treatment System	Patent	10-1881231	2018-07-17
3	Toilet	Patent	10-1865881	2018-06-01
4	Skewer Packaging Box	Design	30-0988850	2019-01-04
5	Skewer Packaging Box	Design	30-0988849	2019-01-04
6	Fish Packaging Case	Design	30-0984938	2018-12-06
7	Food Packaging Container	Design	30-0979380	2018-10-30
8	Carrier Side Window	Design	30-0959544	2018-06-01
9	Pamphlet/Napkin/Fork Package	Design	30-0959545	2018-06-01
10	Transparent Sleeve	Design	30-0955783	2018-05-03
11	Lid Straw Component 1	Design	30-0955514	2018-05-02
12	Traditional Stone-Wall Carrier	Design	30-0947439	2018-03-07
13	Kiln-Shaped Carrier	Design	30-0947438	2018-03-07
14	Carrier-and-Cup Narrative Design	Design	30-0947437	2018-03-07
15	Tripartite Frustoconical Container and Lid	Design	30-0942719	2018-01-29
16	Lid Straw Component 2	Design	30-0940668	2018-01-12
17	Tripartite Frustoconical Container and Lid	Design	30-0940666	2018-01-12
18	Kettle Lid	Design	30-0940669	2018-01-12
19	Integrated Kettle and Lid	Design	30-0940667	2018-01-12
20	Integrated Kettle Form	Design	30-0939118	2018-01-03
21	Perforated Manuscript-Paper Form	Design	30-0939116	2018-01-03
22	Winter Olympics/Paper-Doll Concept	Design	30-0939117	2018-01-03
23	Circular Futuristic Waterless Toilet	Design	30-0909950	2017-06-05
24	Pamphlet Lampshade	Utility Model	20-0481333	2016-09-07

Portfolio



Selected as a 2016 Sejong Book by the Ministry of Culture, Sports and Tourism.



Height-Adjustable Waterless Toilet (2017), international design registration; exhibited at the DDP Craft Fair.

FEATURED SESSION 4



Panel Discussion

MODERATOR / SPEAKER

Hyun-Kyung Lee

Professor, Underwood
International College,
Yonsei University;
Facilitator, UNOSD

"To introduce a sustainable lifestyle, fostered through innovation, duty, and design."

"Yonsei University partnered with UNOSD in order to address the importance of sustainable development, and its daunting challenges. The "Design Thinking Process" is a user-centric approach to develop accelerated solutions for multifaceted problems"

The UNOSD Youth Summer Camp is in its 6th year, and for the past four years, it has taken place at Yonsei University's International Campus in Songdo. The program teaches the use of design thinking methodology, which participants use to contribute to progressing the sustainable development goals by developing prototypes for new inventions. Design thinking is a user-centric approach to developing accelerated solutions for multifaceted problems. The process compartmentalizes a problem into a multi-stage abstract that begins with building a stronger overall understanding of a problem through empathy and seeing both sides.

The UNOSD Youth Summer Camp aims to foster innovative ideas that uphold sustainable development goals. Participants develop ideas using the design thinking process and work towards creating prototypes. An example of this is the creation of a more affordable solution for the packaging of green onions using longer and slim packages that are similar to those used for French baguettes. The prototype was constructed using a 3D printer, and the corporate identity system was set up, and it was displayed at the exhibition center to be promoted to the public. The program welcomes participants in their 20s from any part of the world, and it hopes to inspire young adults to become leaders or innovators toward a more sustainable world.



GEEF2023

Global Engagement & Empowerment Forum
on Sustainable Development

TURNING POINT FROM CRISIS INTO OPPORTUNITY REPORT

February 2nd~3rd, 2023

Centennial Hall & The Commons(Baekyangnuri)
Yonsei University, Seoul, Republic of Korea

| Co-Host |



| Sponsors |



This forum is sponsored by BK21 Graduate School Innovation Project.

GEEF2023

Global Engagement & Empowerment Forum
on Sustainable Development



TOILET DESIGN FOR SAVING AN EARTH & UNOSD SUMMER CAMP



HYUN-KYUNG LEE
Professor, Underwood International College,
Yonsei Univ.



SEUNG MIN PARK
Instructor of Stanford Medical School



JAEWEOON CHO
Professor, UNIST



GINAM KIM
Vice President,
SAMSUNG Advanced Institute of Technology



GEEF2023

Global Engagement & Empowerment Forum
on Sustainable Development



TOILET DESIGN FOR SAVING AN EARTH & UNOSD SUMMER CAMP

TOILET DESIGN FOR SAVING AN EARTH & UNOSD SUMMER CAMP

