

Jaeyoung Ha

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EDUCATION

- Expected 2022 **PhD Candidate, Environmental Design and Planning:** Landscape Architecture and Regional & Community Planning, Kansas State University, Manhattan, Kansas, United States
- February 2018 **MLA, Landscape Architecture: Urban Design Concentration,** Seoul National University, Seoul, South Korea (Academic Advisor: Prof. Saehoon Kim)
• Thesis: A study on crowd congestion in an urban plaza event: A case study of a candlelight rally in Gwanghwamun Square
- February 2013 **BS, Landscape Architecture,** Pusan National University, Busan, South Korea

SUMMARY OF ACADEMIC AND PROFESSIONAL EXPERIENCES

- 2021-Present **Research Assistant,** Lee Kum Sheung Center for Health and Happiness Harvard T.H. Chan School of Public Health, Harvard University
- 2021-Present **Graduate Research Assistant,** Department of Landscape Architecture and Regional & Community Planning, Kansas State University
- 2021 Spring **Graduate Teaching Assistant,** Department of Landscape Architecture and Regional & Community Planning, Kansas State University
- 2020 Fall **Instructor (Course designer and lecturer),** Department of Landscape Architecture and Regional & Community Planning, Kansas State University
- 2018-2020 **Graduate Teaching Assistant,** Department of Landscape Architecture and Regional & Community Planning, Kansas State University
- 2016-2017 **Graduate Research Assistant,** Department of Landscape Architecture, Seoul National University
- 2013-2016 **Landscape architect and urban planner,** Dohwa Engineering, Department of City Planning and Landscape Architecture & Leisure
(Nationally 1st ranked engineering firm in South Korea)

RESEARCH INTEREST

- **Mental wellbeing:** Mental health, Restorative environments, Psychological wellbeing
- **Planning and design:** Landscape planning and design, Urban design, Environment-behavior
- **Immersive environment:** Virtual reality (VR), Augmented reality (AR)
- **Ecology:** Landscape ecology, Landscape pattern, Biodiversity
- **Regional climate and environment:** Land surface temperature, Flooding impact
- **Spatial analysis:** Remote sensing, Geographical information system
- **Data analysis:** Machine learning. Big data management, Data crawling

PUBLICATIONS

Journal articles

Ha, J and Kim, H (2021) The restorative effects of landscape biodiversity: Assessing visual and auditory perceptions among university students, *Urban Forestry & Urban Greening*.
<https://doi.org/10.1016/j.ufug.2021.127259>

Ha, J and Kim, H, and, With, K (2021) Urban green spaces alone are not enough: A landscape analysis linking the spatial distribution of urban green space to mental health, *Landscape and Urban Planning*. **Under review**

Alam, M. M., Skabelund, L. R., Rice, C. W., Todd, T. C., Lin, J., **Ha, J.**, Decker, A (2021). Climate Change Mitigation Potential of Green Roofs: Quantifying a green roof's capacity to sequester carbon in the Flint Hills Ecoregion, *The Journal of Living Architecture*, **Under review**

Ha, J and Kim, S (2017) Congestion patterns found in a massive rally in a square: With a case study on the candlelight rally in *Gwanghwamun Square*, *Journal of the Urban Design Institute of Korea*

Manuscripts in Preparation

Ha, J and Kim, H (**in prep.**) Urban flooding simulation for decision making process in early stage of design using the virtual reality, Target journal: *Multimodal Technologies and Interaction*

Choi, H, **Ha, J**, Lee, S and Song, Y (**in prep.**) Determining impacts of changes in 3D urban morphologies on land surface temperature using bi-temporal airborne laser scanning, Target journal: *Remote Sensing of Environment*

Conferences

Alam, M. M., Skabelund, L. R., Rice, C. W., Todd, T. C., Lin, J., **Ha, J.**, Decker, A (2021). Climate Change Mitigation Potential of Green Roofs: Quantifying a green roof's capacity to sequester carbon in the Flint Hills Ecoregion, *CitiesAlive Virtual 2021 Conference*, **Abstract accepted (Expected: October 2021)**

Ha, J and Kim, H (2021) The Relationship between Landscape and Mental Health: Single Large Versus Several Small Green Spaces, *The Environmental Design Research Association (EDRA) EDRA52 Detroit*. University of Detroit Mercy and Wayne State University.

Ha, J and Kim, H (2021) The restorative effect of landscape biodiversity by the visual and auditory exposure using VR display technology, *Council of Educators in Landscape Architecture (CELA) 100+1 | RESILIENCE Conference 2021. Virtual*.

Choi, H, **Ha, J**, Lee, and Song, Y (2021) Impacts of changes in 3D urban morphologies on the land surface temperature using bi-temporal airborne laser scanning, *Council of Educators in Landscape Architecture (CELA) 100+1 | RESILIENCE Conference 2021. Virtual*.

Ha, J and Kim, H (2021) Does campus biodiversity matter for students' psychological wellbeing? *The annual Capitol Graduate Research Summit (CGRS)*, Topeka, Kansas.

Ha, J and Kim, H (2020) Does campus biodiversity matter for students' psychological wellbeing? *Research and State, Manhattan, Kansas*

Ha, J and Kim, S (2017) A study on the urban and spatial characteristic of crowded area in a massive rally: A case study of candle rally in *Gwanghwamun Square*, Spring Conference, *Urban Design Institute of Korea (UDIK)*, Incheon, South Korea

Research report

Kim, Y, Cho, S, Song, Y, Kim, S, Kim, M, Kim, P, Kim J, Lee, J, Lee, H, Jeong, J, Jae, J, Choi, H, **Ha, J**, Han, C (2019), Urban design strategies for sustainable smart city, Architecture & Urban Research Institute

RESEARCH EXPERIENCE

- 2021-Present **Cities for Well-being**
Research funded by: *Lee Kum Sheung Center for Health and Happiness at Harvard University (Advisor: Patrick Whitney / André Nogueira)*
Graduate Research Assistant
- Proposed regeneration plan for wellbeing of citizens in five post-industrial cities
- 2021-Present **Pilot study and workshop for enhancing rural-to-urban disaster resilience by integrating social, spatial and digital networks**
Research funded by: *National Science Foundation (PI: Dr.Kim)*
Graduate Research Assistant (Lab manager)
- Developing survey instrument and collecting data / Statistical analysis
- 2016-2017 **Redesigning old apartment complexes in Seoul: Health, Community, and Behaviors**
Research funded by: *Seoul Housing & Communities Corporation (PI:Dr.Sung)*
Graduate Research Assistant
- Proposed a community plan to improve the general quality of health for residents.
- Investigated site, collected and analyzed data, and composed documents to improve apartment community plan for elderly residents
- 2016-2017 **Energy poverty and urban design of low-rise residential housing**
Research funded by: *National Research Foundation of Korea (PI:Dr.Kim)*
Graduate Research Assistant
- Redeveloped deteriorated low-rising residential housing for energy-impooverished households.
- Collected architectural and urban property-related data and performed Arc-GIS analysis

TEACHING EXPERIENCE

- 2021 Spring **Graduate Teaching Assistant**
LAR 740 Advanced studio
Instruct the urban flooding analysis and simulation using virtual reality
- 2020 Fall **Instructor (Course designer and lecturer)**
LAR741 AR/VR in landscape architecture (a newly designed course at college of architecture)
- 2020 Spring **Graduate Teaching Assistant**
LAR898 Master's Report
- 2019 Fall **Graduate Teaching Assistant**
LAR 648 Advanced studio / LAR 705 Advanced studio
Instruct VR tutorials: The construction of urban and landscape environment in Virtual Reality
- 2019 Spring **Graduate Teaching Assistant**
LAR 648 Advanced studio / LAR 750 Advanced Seminar
- 2018 Fall **Graduate Teaching Assistant**
LAR 710 Advanced studio / LAR 750 Advanced Seminar

RESEARCH ADVISING

- 2020 Spring **Master of landscape architecture**, Marcos Aleman
Master report: *A second look: Improving safety perceptions of urban alleys*
Advising the application of VR technologies (HTC VIVE/Unreal engine) in master thesis
Advising statistics for his research
- Master of landscape architecture**, Caleb Parker
Master report: *Reconnecting A Fragmented Landscape: A Multi-scale Ecological Approach to Green Space Design in Wichita, Kansas*
Advising Remote sensing / FRAGSTAT software

INVITED LECTURES & CRITIQUES

- 2021 Summer Invited critique for studio, ENVD 201: Environmental Design Studio 1, (Instructor: MacNair, Michel), Kansas State University, June 25, 2021
- 2021 Summer Metaverse world in landscape architecture and urban design, (Instructor: Choi, Songhyun), Pusan National University, May 24, 2021
- 2021 Spring Invited critique for studio, ENVD 201: Environmental Design Studio 2, (Instructor: Kim, Byungsoo), Kansas State University
- 2021 Spring Future urban space, Landscape Architecture and Regional & Community LAR 750: Advanced Seminar (Instructor: Kim, Hyungjin), Kansas State University, March 22, 2021
- 2021 Spring World cities: Seoul, Landscape Architecture and Regional & Community PLAN 215: World Cities (Instructor: Rishi, Susmita), Kansas State University, March 8, 2021
- 2021 Spring World cities: Seoul, Urban Studies URBN 20104: World cities (Instructor: Goharipour, Hamed), College of Wooster, February 18
- 2020 Fall Invited critique for studio, ENVD 201: Environmental Design Studio 1, (Instructor: MacNair, Michel), Kansas State University, December 4, 2020
- 2020 Spring World cities: Seoul, Landscape Architecture and Regional & Community PLAN 215: World Cities (Instructor: Rishi, Susmita), Kansas State University, April 15, 2020
- 2019 Fall Invited critique for studio, ENVD 201: Environmental Design Studio 1, (Instructor: Goharipour, Hamed), Kansas State University, November 13, 2019
- 2019 Spring The history of urban planning in Seoul: Landscape Architecture and Regional & Community PLAN 699: Qualitative Planning (Instructor: Goharipour, Hamed), Kansas State University, February 26, 2019
- 2019 Spring World cities: Seoul, Landscape Architecture and Regional & Community PLAN 215: World Cities (Instructor: Gibson, Huston J), Kansas State University, February 22, 2019
- 2018 Fall Landscape research and practice, Landscape Architecture and Regional & Community LAR 750: Advanced Seminar (Instructor: Kim, Hyungjin), Kansas State University, December 5, 2018

PROFESSIONAL EXPERIENCE

- 2013-2016 **Project Manager and Engineer**
*Dohwa Engineering, Department of City Planning and Landscape Architecture & Leisure
Seoul, South Korea (*Nationally 1st ranked engineering firm in South Korea)
- Oversaw planning and designing of construction projects in urban planning, civil engineering, electronics & telecommunication, environmental assessments, transportation, architecture, and landscape architecture, and consulted with government agencies
- Developed land-use plans and obtained construction approval
- Created concept plans, programs, master plans, computer graphics, and schematic and detailed designs

PROFESSIONAL PROJECTS

Theme entertainment and Mixed use

- 2015-2016 **Korean classic music (*BaekjeGayo*) theme park**
Client: *City of Jeongeup, South Korea* (\$768,000)
Project Manager
- Coordinated overall planning and designing construction projects in urban planning, civil engineering, electronics & telecommunications, environmental assessments, transportation, architecture, and landscape architecture / Consultation with government organization
- Developed concept plans, programs, master plans, and computer graphics
- Wrote reports and prepared schematic and detailed designs
- Produced land-use plans and obtained construction approval
- 2015-2016 **Raspberry(*Omija*) theme park**
Client: *Mungyeong Agricultural Technology Center, South Korea* (\$264,000)
Project Manager in Landscape Architecture & Urban Planning
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design
- Responsible for land use plan and construction approval in urban planning
- 2014-2015 **Gapyeonggun military theme park**
Client: *City of Gapyeong, South Korea* (\$387,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports and schematic design
- 2013-2015 **Sila metal craft district development project**
Client: *City of Gyeongju, South Korea* (\$912,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports and schematic design
- 2013-2014 **Hapcheon agricultural theme park**
Client: *City of Hapcheon, South Korea* (\$450,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic and writing reports
- 2013-2016 **Sunseonghyun cultural complex**
Client: *City of Andong, South Korea* (\$1,766,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design

2013-2015 **Yecheon riverfront cultural park**
Client: *City of Yecheon, South Korea* (\$1,975,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design

Urban park

2014-2016 **Maehyangli peace park**
Project Designer in Landscape Architecture
Client: *City of Hwaseong, South Korea* (\$985,000)
- Conducted programs, computer graphic, writing reports in landscape architecture
- Responsible for land use plan and construction approval in urban planning

2014-2016 **Gyengsangbukdo government office building park**
Client: *Gyengsangbukdo development cooperation, South Korea* (\$372,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design
- Responsible for land use plan and construction approval in urban planning

2014-2016 **Conceptual planning of Hoesan white lotus pond**
Client: *City of Muan, South Korea* (\$240,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports and schematic design

2013-2014 **Akyang waterfront park**
Client: *City of Haman-gun, South Korea* (\$360,000)
Project Designer in Landscape Architecture
- Conducted computer graphic, writing reports and schematic design

2013-2014 **Deokpung neighborhood park**
Client: *City of Hanam, South Korea* (\$303,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design
- Responsible for land use plan and construction approval in urban planning

Memorial park

2015-2016 **Haenam Memorial park**
Client: *City of Haenam, South Korea* (\$964,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports and schematic design

2014-2015 **Conceptual Planning of demilitarized zone (DMZ) peace park**
Client: *Ministry of Unification, South Korea*
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports and schematic design

Urban green space planning

2014~2015 **2030 Incheon city urban green space planning**
Client: *City of Incheon, South Korea*

Project Designer in Landscape Architecture
- Processed approval documents and produced computer graphics
- Wrote reports

2014~2015 **Uijeongbu city park planning & feasibility study**
Client: *City of Uijeongbu, South Korea* (\$240,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports and schematic and detailed design

Oversea project

2015-2016 **UAE nuclear power plant #1,2 Landscape planning and design**
Client: *Emirates nuclear energy cooperation, Korea Electric Power Corporation* (\$545,780)
Project Designer in Landscape Architecture
- Composed and translated reports
- Prepared schematic and detailed landscape architectural designs

Recreational place

2013-2014 **Korean Airforce base golfclub**
Client: *Ministry of National Defense, South Korea* (\$845,000)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design

Miscellaneous

2013-2014 **The feasibility study of Jeongdongjin**
Client: *City of Yeongdeok, South Korea* (\$19,800)
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic and writing reports

2013-2014 **Sunchangeup urban renewal project**
Client: *City of Sunchang, South Korea*
Project Designer in Landscape Architecture
- Conducted concept plans, programs, planning, master plans, computer graphic, writing reports, schematic and detailed design

AWARDS AND HONORS

2021 **Scholarship**, Technology Support Scholarship, Graduate School Council (GSC), Kansas State University, United States

2021 **College of Architecture, Planning, and Design recognition**, Graduate School Council (GSC), Kansas State University, United States

2021 **Scholarship**, Do Sup Chung International Student Scholarship, Kansas State University, United States

2020 **Research Grant**, the 2021 Arts, Humanities & Social Sciences Small Grant Program, Graduate School Council (GSC), Kansas State University, United States

2020 **The top ten presenters**, Research and the State Graduate Student Poster Session Graduate

School Council (GSC), Kansas State University, United States

- 2020 **1st Prize**, EDRA Interdisciplinary Online Workshop
Environmental Design Research Association Student Research Network (EDRA SRN), United States
- 2012 **1st Prize**, Herald Design English Presentation Competition
Re-imagine! Herald Design Forum, South Korea
- 2012 **Prize for Excellence**, Pusan Green Landscape Architecture Exhibition Awards
KASLA in Pusan, South Korea
- 2010 **Prize for Excellence**, National Urban Forest Design Competition,
Korea Forest Service, South Korea
- 2007-2011 **University Scholarship for Academic Excellence and Achievement**,
Pusan National University, Busan, South Korea

CERTIFICATIONS

- 2021 **Certificate of achievement, Kansas State University**
- 2020 **Certificate of professional development, Graduate Student Council Professional Development Program**
- 2012 **Licensed Engineer in Landscape Architecture, Republic of Korea**

ACTIVITIES AND SERVICES

- 2013–Present **The economist study group**
Founding member and study organizer
- 2019–Present **Post Baccalaureates of APdesign at Kansas State University**
Treasurer and Founding member
- 2021–Present **The Environmental Design Research Association member**
Student member
- 2021–Present **Global Landscape Architects Network**
Member
- 2021–Present **Graduate Student Council (GSC) at Kansas State University**
Awards and Recognition committee

SKILLS

Graphic Tools

Proficient in various visual representation techniques

- Auto Cad, Unreal Engine 4, Rhino, Sketch up, V-ray
- Adobe Photoshop, Adobe Illustrator, Adobe InDesign

Virtual reality specialty

- Software: Unreal engine, Twinmotion
- Hardware: VIVE HTC, Oculus

Analysis Tools

Efficient in collecting and reprocessing research data

- Geography tool: ArcGIS, ENVI, City Engine
- Statistic tool: SPSS, SAS, Rstudio
- Landscape ecology tool: FRAGSTAT
- Machine learning: Python