Jinmo Rhee

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Education

2024 Ph.D. in Computational Design, School of Architecture, Carnegie Mellon University, US
2019 M.S. in Computational Design, School of Architecture, Carnegie Mellon University, US
2016 B.Arch. With Honors, College of Fine Arts, Korea National University of Arts, Korea

Professional Qualifications

2016 Royal Institute of British Architects (RIBA) Part II, 66 Portland Place, London W1B 1AD, England
2011 Royal Institute of British Architects (RIBA) Part I, 66 Portland Place, London W1B 1AD, England

Academic Appointments

2023 – Assistant Professor of Data Science and Design, School of Architecture, Planning and Landscape, University of Calgary, Canada
Promotion to Associate Professor with tenure currently under review; decision expected in March 2027.
2019 – 23 Graduate / Studio Instructor, School of Architecture, Carnegie Mellon University, US
2017 – 19 Teaching Assistant, School of Architecture, Carnegie Mellon University, US

Experience

2023 – Director, DESTECTIC (Design Technology and Tactics), University of Calgary, Canada
2023 – Associate Director, LID (Laboratory for Integrated Design), University of Calgary, Canada
2020 – Co-Founder, CRAIDL (Creative AI and Design Launchpad), Carnegie Mellon University, US
2018 – 20 Manager, CoDeLab (Computational Design Laboratory), Carnegie Mellon University, US
2015 – 19 Interior and Branding Architect, JinmoRhee, Korea
2017.01 Project Architect, Urban Operation, Korea
2013 – 17 Architectural Assistant, SSWA Architects, Korea
2015.07 Project Manager, Architectural Assistant, ArchiWorkshop, Korea
2013.09 Architectural Assistant, MLNP Architects, Korea
2013.04 Instructor of Rhinoceros 3D and Grasshopper Workshop, Ein Architects & Engineering, Korea

Funded Research

2026 – 28 PI with Prof. Alberto de Salvatierra at the Center for Civilization (CFC), *Return of Interest (ROI) Rural Area Modeling Project*, funded by Alberta Real Estate Foundation (AREF), CAD $250,000
2026 – 27 PI, *An Interactive Ingress Prediction Tool for Instant Entry Flow Feedback in Early-Stage Layout Design*, funded by Mitacs and Perkins&Will, CAD $30,000
2026 – 27 PI with Jason S. Johnson, Sneha Jain, and 19 additional collaborators, *Building Transdisciplinary Design Agency: Deepening International Collaborations Through CAAD Futures 2027*, funded by Transdisciplinary Scholarship Connector Grant (Consolidating Stream) from University of Calgary, CAD $18,000
2026 PI, *World-Model-Based Spatial Intelligence in Architectural Design Studio*, in-kind educational software support from World Labs for Marble access in studio teaching, estimated value USD $2,250
2025 – 27 PI, *Research and Development of a Generative Layout System for Residential Floorplans*, funded by Higharc, CAD $147,000

2025 – 2028 Co-PI with Prof. Alberto de Salvatierra at the Center for Civilization (CFC), *CCC x 801: An impact study of SAPL's presence in Downtown Calgary*, funded by City of Calgary and Calgary Downtown Association (CDA), CAD $132,500

2025 – 27 Co-PI with Dr. Jason Hawkings, Dr. Alain Pietroniro, Dr. Lina Kattan, Prof. Alberto de Salvatierra, Dr. Seiran Heshami, Dr. Byron Andrew Miller, *Social Innovation in Engineering for Climate-Neutral Cities*, funded by the Social Sciences and Humanities Research Council (SSHRC) through New Frontiers in Research Fund (NFRF), CAD $250,000

2025 – 26 PI with Dr. Pedro Veloso and Dr. Emek Erdolu, *Reimagining Generative Design Across Disciplines in the Era of AI*, funded by Transdisciplinary Scholarship Connector Grant (Initiating Stream) from the University of Calgary, CAD $8,500

2023 – 25 Co-PI with Prof. Alberto de Salvatierra at the Center for Civilization (CFC), *Return of Interest (ROI) Urban Modeling Pilot Project*, funded by Alberta Real Estate Foundation and the City of Airdrie, CAD $260,000

2024 – 26 PI, *An Automated Camp Layout Technology for Rapid, Efficient, and Safer Wildfire Evacuee Settlement*, Amazon Web Services (AWS), Cloud Credit for Research, USD $10,000

2023 – 24 PI, *An Automated Deployable Camp Layout Technology for Rapid, Efficient, and Safer Refugee Settlement Design: Proof of Concept Stage*, funded by VPR Catalyst Grants from the University of Calgary, CAD $18,000

2020 – 23 PI, *Generative Design for Apartment Building Layout Using Artificial Intelligence Technology*, funded by DL E&C, USD $220,000

Refereed Publications

2026 **Jinmo Rhee**, "From Generated Images to Connected Interior Spaces: A World Model Design Experiment in Architectural Spatial Stitching," submitted to the *Association of Collegiate Schools of Architecture (ACSA) 115th Annual Meeting, Atlanta, 2027* (under review)

2026 Eunjoo Oh, **Jinmo Rhee**, Pedro Veloso, and Katherine McLean, "When Craft Inverts: Inheritance, Interruption, and the Redesign of the Architectural Studio," submitted to the *Journal of Architectural Education*, 81, no. 1 (Spring 2027) (under review)

2026 **Jinmo Rhee**, *Chapter 2. Reconfiguring Design Agency in Artificial Intelligence: Language Interfacing Design Knowledge and Space* in *The Routledge Companion to Artificial Intelligence in Architecture, 2nd Ed.*, Routledge (in-press)

2026 **Jinmo Rhee**, Chapter 7. Artificial Intelligence and the Changing Concept of the City: From Bounded Object to Spatial Aggregation, *Artificial Intelligence in Urban Planning and Design, 2nd Ed.*, Elsevier (in-press)

2026 Alberto de Salvatierra, Buyantegsh Naranbaatar, Giovanna Cross-Bussoli, Jasmine Keller, **Jinmo Rhee**, Kiana Rasti, Kiarash Kiany, Ruihong Chen, "Rethinking Serious Games for Urban Systems: A Systematic Review Toward Iterative Citizen-Centered Gamification of Water and Transportation" in the *Sustainability* (under review)

2026 Manuel Rodríguez Ladrón de Guevara, **Jinmo Rhee**, Ardavan Bidgoli, Vaidas Razgaitis, and Michael Bergin "Tokenizing Buildings: A Foundation Transformer For Layout Synthesis" in the *14th European Conference on Visual Information Processing (EUVIP), Luxembourg*. Awarded *Best Industrial Paper*

2026 **Jinmo Rhee**, "From Tool to Design Companion: Asymmetric Human–Machine Collaboration in Architectural Design", *KAIST Research Series - Cultural DNA 2026*, Springer (in-press)

2026 **Jinmo Rhee**, "Is Seoul Really a Republic of Apartment Complexes? Urban Form Segregation and the Paradox of Diversity" in the *Environment and Planning B: Urban Analytics and City Science* (under review)

2026 **Jinmo Rhee**, "A Domestic Development Attempt and the International Position of Early Korean Architectural CAAD: A Reinterpretation of the KIST–Korea National Housing Corporation CAD/CON Development Case" in the *Annual Conference of Architectural Institute of Korea, Seoul*

2026 **Jinmo Rhee**, Kiarash Kiany and Alberto de Salvatierra, "Revealing Implicit Associations Between Urban Form and Socioeconomic Indices" in the *Environment and Planning B: Urban Analytics and City Science*

2026 **Jinmo Rhee**, Eunjoo Oh, and Pedro Veloso, "Computational Design as a Mode of Inquiry: Teaching Paradigms Unplugged" in the *Association of Collegiate Schools of Architecture (ACSA)'s 114th Annual Meeting, Chicago*

2026 Kiarash Kiany and **Jinmo Rhee**, "Evaluating the Fiscal Performance of Urban Land Use Plans Through a Data-Driven Fitness Index" in the *31st International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA), Taiwan*

2025 Pedro Veloso and **Jinmo Rhee**, "Shifting Agencies: Human–AI Co-Design of Dwelling Layouts via Deep Reinforcement Learning" in the *Association for Computer Aided Design in Architecture (ACADIA) Annual Conference 2025, Miami*

2025 **Jinmo Rhee**, "Typological Knowledge-Driven Form Synthesis as a Design Method with Artificial Intelligence" in the *Annual Conference of Architectural Institute of Korea, Seoul*. Awarded *Best Paper in the Computational Design Division*

2025 **Jinmo Rhee**, "Computational Design Education in Schools of Architecture: Exploring Curriculum Applicability through Global Cases" in the *Annual Conference of Architectural Institute of Korea, Seoul*

2025 **Jinmo Rhee**, Eunjoo Oh, "Pedagogy Explorations into Alternative Use of Generative AI in Design Studios" in the *Technology | Architecture + Design (TAD) Journal*

2025 **Jinmo Rhee**, Pedro Veloso, "Efficient Camp Layout Design for Safer Wildfire Evacuee Solutions" in the *30th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA), Tokyo*

2025 **Jinmo Rhee**, "Comparative Analysis of Urban Structures in Three American Rust Belt Cities" in *Environment and Planning B: Urban Analytics and City Science*

2024 **Jinmo Rhee** and Ramesh Krishnamurti, "An Inductive Method for Classifying Building Form in a City with Implication for Orientation" in *Environment and Planning B: Urban Analytics and City Science*. Awarded *the Michael Breheny Prize for the Best Paper*

2023 **Jinmo Rhee** and Ramesh Krishnamurti, "Latent Space to Support Virtual 3D Models" in *Cultural Space on Metaverse: KAIST Research Series*

2023 **Jinmo Rhee** and Pedro Veloso, "Single Objective Optimization for Building Layout in an Apartment Complex" in *Annual Conference of Architectural Institute of Korea*, Jeongseon

2023 **Jinmo Rhee**, Pedro Veloso, and Ramesh Krishnamurti, "Three Decades of Machine Learning with Neural Networks in Computer-aided Architectural Design (1990-2021)" in *Design Science*

2023 Tomas Cabezon Pedroso, **Jinmo Rhee**, Daragh Byrne, "Feature space exploration as an alternative for design space exploration beyond the parametric space" in the *28th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)*, Navrangpura

2023 Michael Hasey, **Jinmo Rhee**, Daniel Cardoso Llach, "Form Data as a Resource in Architectural Analysis: An Architectural Distant Reading of Wooden Churches from the Carpathian Mountain Regions of Eastern Europe" in *Digital Creativity*

2023 **Jinmo Rhee** and Pedro Veloso, "A Physics-based Constraint Solver for the Site Layout Optimization of Non-convex Buildings with Multiple Setback Requirements" in the *20th International Conference of CAAD FUTURES*, Delft

2023 **Jinmo Rhee** and Bradley Williams, "Cost-Effective 3D Urban Massing Reconstruction of Public Aerial LiDAR Scans" in the *20th International Conference of CAAD FUTURES*, Delft

2022 **Jinmo Rhee**, Pedro Veloso, and Kim Jeongheon, "Graph-based Representation of Apartment Building Mass for Complex Layout" in *Annual Conference of Architectural Institute of Korea*, Jeju

2022 Dana Cupkova, Han Meng, and **Jinmo Rhee**, "Lithopic House: Computational Design Framework for re-Shaping Ecologically Attuned Architectural Systems out of Granular Matter" in the *42nd Conference of Association for Computer Aided Design in Architecture (ACADIA)*, Philadelphia

2022 **Jinmo Rhee**, Pedro Veloso, Ardavan Bidgoli, Manuel Rodríguez, "Bubble2Floor: A pedagogical experience with deep learning for floor plan generation" in the *27th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)*, Australia

2022 **Jinmo Rhee**, Chapter 5. Urban Form Analysis through Morphometry and Machine Learning, *Artificial Intelligence in Urban Planning and Design, 1st Ed.*, Elsevier

2021 **Jinmo Rhee** and Pedro Veloso, "Type Investigation in the Form of High-rise Building Using Deep Neural Network" in the *19th International Conference of CAAD FUTURES*, Los Angeles

2021 **Jinmo Rhee**, Pedro Veloso, Ramesh Krishnamurti, "Generative Design of Urban Fabrics Using Deep Learning" in the *26th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)*, Hong Kong

2021 **Jinmo Rhee**, "Implementing Diffusion-Limited Aggregation Algorithm to Space Planning: A Design Experiment for Planning Underground Plaza Using Multi-agent System" in *Annual Conference of Architectural Institute of Korea*, Yeosu

2020 **Jinmo Rhee**, Pedro Veloso, Ramesh Krishnamurti, "Integrating Building Footprint Prediction and Building Massing" in the *25th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)*, Bangkok

2019 **Jinmo Rhee** and Jae-won Chung, "A Study of Automation of Housing Design Method Using Artificial Intelligence" in *Annual Conference of Architectural Institute of Korea*, Daejeon, (Best Paper Awarded)

2019 **Jinmo Rhee** and Jae-won Chung, "Applicability of Artificial Intelligence in Apartment Complex Design" in *Annual Conference of Architectural Institute of Korea*, Daejeon

2019 **Jinmo Rhee**, Daniel Cardoso Llach, Ramesh Krishnamurti, "Context-rich Urban Analysis Using Machine Learning" in *Architecture in the Age of the 4th Industrial Revolution, eCAADe + SIGraDi*, Porto

2019 Pedro Veloso, **Jinmo Rhee**, Ramesh Krishnamurti, "Multi-agent Space Planning A literature review (2008-2017)" in the *18th International Conference of CAAD FUTURES*, Daejeon

2016 **Jinmo Rhee**, "A study of Similar Quality of Transition Space between Korean Apartment House and Traditional House" in *Collections of Excellent Graduation Paper, Architectural Institute of Korea*

2011 Jiho Kim and **Jinmo Rhee**, "Computing Nature" in *Computing Aesthetics v.18-no.4, Korea Information Processing Society*

Other Publications

2025 **Jinmo Rhee**, *Generative Design, How Does Artificial Intelligence Design?*, Ooribook

2024 Michael Hasey, **Jinmo Rhee** and Daniel Cardoso Llach, *Form data as a resource in architectural analysis: an architectural distant reading of wooden churches from the Carpathian Mountain regions of Eastern Europe* in Critical Computational Relations in Design, Architecture and the Built Environment, Routledge

2024 **Jinmo Rhee** and Ramesh Krishnamurti, *Latent Space to Support Virtual 3D Models* in Cultural Space on Metaverse, Springer Nature Singapore

2024 **Jinmo Rhee** and Pedro Veloso, *Digital Media Series: Python*, Amazon Kindle Publisher

2021 Pedro Veloso and **Jinmo Rhee**, "In Pursuit of Deep Architectural Design" in *Rumoer #76 Generative Design*, Building Technology Study Association

2020 **Jinmo Rhee**, *Context-rich Urban Analysis Using Machine Learning*, Eliva Press

2020 **Jinmo Rhee**, *Artificial Intelligence for Architecture*, Ooribook

2020 **Jinmo Rhee**, *Architectural Artificial Intelligence (Korean)*, Bookk

2020 **Jinmo Rhee** and Eddy Man Kim, *Digital Media Series: Grasshopper*, Amazon Kindle Publisher

2019 **Jinmo Rhee** and Eddy Man Kim, *Digital Media Series: Rhinoceros*, Amazon Kindle Publisher

Exhibitions

2026 **Jinmo Rhee**, Curator and Organizer (with Emek Erdolu and Pedro Luís Alves Veloso), "*Reimagining Generative Design*," Exhibition + Symposium, Richardson Memorial Hall Gallery, Tulane University School of Architecture, New Orleans, LA, USA, April 3–20, 2026

2021 Exhibition Assistant, "*Vers un imaginaire numérique*," Montréal's Design Centre, Montréal, Canada

2021 **Jinmo Rhee**, "*Rethinking Urban Form: Morphological Understanding of City Space through Data*," Video work, Austria Pavilion, Venice Biennale

2019 **Jinmo Rhee**, Invited Artist, "*Context-rich Urban Analysis and Generation Using Artificial Intelligence*," The 2nd Special Exhibition for Korean Students in America, Korean Institute of Architects, Culture Station Seoul 284, Seoul, Korea

2015 "*Skydium and Jamsil Sports Complex Renovation Master Plan*," Korea National University of Arts, Seoul, Korea

2013 **Jinmo Rhee**, Invited Artist, "*Aesthetics of the Nature*," Munji Culture Center, Seoul, Korea

2013 Entry Team Artist, "*REAL DMZ 2013*," Art Sonje Center, Seoul, Korea

Courses

Assistant Professor at University of Calgary

Winter 2027 Introduction to Computational Design (DSGN 263), School of Architecture Planning and Landscape,
Winter 2026 University of Calgary, Canada
Winter 2025

Winter 2027
Winter 2026
Winter 2025
Computational Design for Built Environment (DSGN 363), School of Architecture Planning and Landscape, University of Calgary, Canada

Winter 2027
Winter 2026
Winter 2024
Senior Research Studio in Architecture II (ARCH 702), School of Architecture Planning and Landscape, University of Calgary, Canada

Winter 2027
Winter 2026
Studio Research Selective (ARCH 690), School of Architecture Planning and Landscape, University of Calgary, Canada

Fall 2026
Fall 2025
Fall 2024
Fall 2023
Scripting and Generative Design (ARCH 680.29), School of Architecture Planning and Landscape, University of Calgary, Canada

Fall 2024
Intermediate Architectural Design Studio (ARCH 606), School of Architecture Planning and Landscape, University of Calgary, Canada

Winter 2024
Data Processing for Computational Design (ARCH 680.30), School of Architecture Planning and Landscape, University of Calgary, Canada

Winter 2024
Design with Deep Learning (ARCH 672.32), School of Architecture Planning and Landscape, University of Calgary, Canada

Graduate Instructor at Carnegie Mellon University

Spring 2023
Spring 2022
Generative Systems for Design (68-702), School of Architecture, Carnegie Mellon University, US

Fall 2022
Fall 2021
Fall 2020
Scripting and Parametric Design (48-724), School of Architecture, Carnegie Mellon University, US

Spring 2022
Fall 2021
Spring 2021
Introduction to Artificial Intelligence in Design Studies (48-770), School of Architecture, Carnegie Mellon University, US

Spring 2021
Shaping Form (62-212), Carnegie Mellon University Qatar Campus, Qatar

Spring 2022
Spring 2021
Descriptive Geometry (62-175), School of Architecture, Carnegie Mellon University, US

Spring 2021
Spring 2020
Fundamentals of Computational Design (62-275), School of Architecture, Carnegie Mellon University, US

Fall 2020
Fall 2019
Architecture Design Studio: Foundation I (48-100), School of Architecture, Carnegie Mellon University, US

Teaching Assistant at Carnegie Mellon University

Fall 2019
MSCD Pre-Thesis II (48-716), School of Architecture, Carnegie Mellon University, US

Fall 2019
Fall 2018
Digital Skill Workshop 2018 and 2019 (48-689), Carnegie Mellon University, US

Fall 2019
Fall 2018
Digital Media I and II (48-120, 48-125, 62-122, 62-123), Carnegie Mellon University, US

Fall 2017
Generative Modeling (48-783), Carnegie Mellon University, US

Invited Lectures

2026
Invited Speaker, "Computational Models and the Reconfiguration of Design Agency," School of Computing & Data Science, Wentworth Institute of Technology, Boston, MA, USA

2026
Invited Speaker, "Artificial Intelligence and the Changing Concept of the City: From Bounded Object to Spatial Aggregation," Urban Analytics Symposium, University of Calgary, Canada

2026
Guest Speaker, "From Tool to Design Companion: Asymmetric Human–Machine Collaboration in Architectural Design", Graduate School of Culture Technology, KAIST, Korea

2026
Guest Speaker, "Formulating Design Problem into Data Matter: How Can Designers Use AI as a Lens to Rethink and Reframe Our Existing Design Knowledge for Spark Latent Creativity?", Perkins & Will, On line

2026 Keynote Speaker at Symposium, "Shifting Design Agency at the Confluence of Learning Paradigms and Generative Design", Tulane University School of Architecture, New Orleans, LA, USA

2025 Invited Speaker, "Generative Design: How Does Artificial Intelligence Design?", Department of Architecture & Architectural Engineering, Seoul National University, Korea

2025 Guest Speaker, "Witnessing Culture Technology in an Era of Collapsing Boundaries: Where Design, Space, Technology, and the Socio-Cultural Intersect", Graduate School of Culture Technology, KAIST, Korea

2025 Guest Lecturer for LAND 201, "Computational Urban Morphology: How Are Urban Spaces Read and Planned Through Data?", School of Architecture Planning and Landscape, University of Calgary, Canada

2024 Discussion Panel, "AI, Friend or Foe?", d.talks, Calgary, Canada

2024 Discussion Panel, "Hop on the Train or Get Left Behind: The Inevitable Amalgamation of Architects' Ingenuity & Artificial Intelligence?", BUILDEX Alberta, Calgary, Canada

2024 Guest Lecturer for DSGN 231, "Computational Urban Morphology: How Are Urban Spaces Read and Planned Through Data?", School of Architecture Planning and Landscape, University of Calgary, Canada

2024 Guest Lecturer, "Learning-based System in Design, Beyond Oracle", Graduate School of Culture Technology, KAIST, Korea

2023 Guest Lecturer for 62-706 Generative Systems for Design, "Learning-based System in Design, Beyond Oracle", School of Architecture, Carnegie Mellon University, US

2023 Guest Lecturer for ARCH 8070 RAS Theory, "Learning-based System in Design, Beyond Oracle", Stuart Weitzman School of Architecture, University of Pennsylvania, US

2021, 2022 Guest Speaker for Graduate Seminar: Situating Research, "Analysis of Urban Form Using Artificial Intelligence", School of Architecture, Carnegie Mellon University, US

2021 Discussion Panel for Exchange: AI in Design, School of Architecture, Carnegie Mellon University, US

2017 Guest Lecturer for Intermediate Design Studio, "Digital to Physical", Sookmyung Women's University, Korea

2017 Guest Speaker for Advanced Design Studio, "Digital to Physical", Korea National University, Korea

2013 Guest Speaker, "Generative Design in Architecture", Ein Architects & Engineering, Korea

Student Advising and Awards

2026 – 30 PhD Student Supervisor in Environmental Design (Computational Design Focus), Michael de Haan, University of Calgary, Canada

2026 – 30 PhD Student Supervisor in Environmental Design (Computational Design Focus), Kiarash Kiany, University of Calgary, Canada

2026 Studio Instructor and Advisor, Bryce Meintzer, recipient of the Royal Architectural Institute of Canada Medal and Honour Roll and the American Institute of Architects Medal for Academic Excellence, University of Calgary, Canada

2026 Supervisor, Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award (USRA) recipient Sean Luard, University of Calgary, Canada

2026 Co-Supervisor, Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award (USRA) recipient Luigi Mancuso, University of Calgary, Canada

2025 Finalist, Baglietto Furniture Design Competition—student project (Kiarash Kiany and Kiana Rasti)

2025 PhD Defense Neutral Chair, "Gamified Design Configurator: A Performance-Aware, Data-Driven Framework for Enabling Informed Decision-Making by Non-Experts in Early-Stage Design", Arman Khalilbeigi Khameneh, University of Calgary, Canada

2024 – 26 Master's Student Supervisor in Design Research (Computational Design Focus), Kiana Rasti, University of Calgary, Canada

2024 – 26 PhD Supervisory Committee Member, Alex Sidaway, University of Calgary, Canada

2024 – 25 Master's Student Supervisor in Design Research (Computational Design Focus), Kiarash Kiany, University of Calgary, Canada

2024 DDes Defense Neutral Chair, "Entangled Methodologies for Participatory Multispecies Futures", Priyanka Bista, University of Calgary, Canada

2024 PhD Defense Examiner, "Multi-objective Optimization of Building Envelopes for Embodied and Operational Greenhouse Gas Emissions", Negar Badri, University of Calgary, Canada

2024 Master Thesis Committee Member, "Design with data-driven shape rule recognition through learning-based shape grammar interpreter", Yujeong Seo, Carnegie Mellon University, US

2024 Master Thesis Committee Member, "Speculative City through the Ideation of Spaces in Metaverse", Kenneth Anggara, University of British Columbia, Canada

2023 Research Advisor, "Identifying Building Types Using Deep Learning", Zhiqi Pang, University of Calgary, Canada

2023 Master Thesis Committee Member, "Decrypting the Black Box: a designer's journey into the infinite possibilities of ML in design", Tomas Cabezon Pedroso, Carnegie Mellon University, US

2023 Master Thesis Committee Member, "Building Information Twinning: Investigating the Software Architecture of a Building's Digital Twin", Brad Williams, Carnegie Mellon University, US

2022 Master Thesis Committee Member, "The 3D Form Analysis of Regional Architecture Using Deep Learning: A Case Study of Wooden Churches from the Carpathian Mountains", Michael Hasey, Carnegie Mellon University, US

Awards and Recognition

2026 Best Industrial Paper Award, *14th European Conference on Visual Information Processing (EUVIP 2026)*

2025 The Michael Breheny Prize for the Best Paper, *Environment and Planning B: Urban Analytics and City Science*

2025 Best Paper, Annual Conference of Architectural Institute of Korea

2021 Grand Prize in Digital Architecture Competition 2021 (DA 2021), Architectural Institute of Korea and Korea Ministry of Land, Infrastructure and Transport

2021 – 22 Fellowship, Architectural Design Human Resource Development Project, Korea Agency for Infrastructure Technology Advancement

2020 Young CAADRIA Award 2020, The Association for Computer-Aided Architectural Design Research in Asia

2019 Grand Prize in Digital Architecture & Architecture Startup Competition 2019 (DAAS 2019), Architectural Institute of Korea and Korea Ministry of Land, Infrastructure and Transport

2019 Best Paper, Annual Conference of Architectural Institute of Korea, 2019

2019 SoA + GSA International Conference Travel Grants, Carnegie Mellon University

2018 – 22 Graduate Student Small Project Help (GuSH) funds, Carnegie Mellon University

2017 – 19 Merit-based Admission Scholarship, Carnegie Mellon University

2016 Honorable Mention in Collections of Excellent Graduation Paper, Architectural Institute of Korea

2016 Valedictorian, Korea National University of Arts

2015 Kookmin Bank Academic Scholarship

2014 Honorable Mention in Architectural Structure Design Competition, The Korean Structural Engineers Association

2010 – 15 Academic Performance Scholarship, Korea National University of Arts

2010 Honorable Mention in Jeju Architecture Awards, Jeju City Government

2010 Honorable Mention in Idea Competition of the Public Facility on Kwanghwamoon Plaza, Seoul Design Foundation

Academic Service

University Service

2026 Scholarship Adjudication Committee Member, *Faculty of Graduate Studies (FGS), University of Calgary*

2026 Hiring Search Committee Member (Computation and Making), *M.Arch Program, School of Architecture, Planning and Landscape (SAPL), University of Calgary*

2026 Hiring Search Committee Member (Building Science), *M.Arch Program, School of Architecture, Planning and Landscape (SAPL), University of Calgary*

2026 Hiring Search Committee Member (History and Theory), *M.Arch Program, School of Architecture, Planning and Landscape (SAPL), University of Calgary*

Conference Leadership & Service

2026 - 2027 Organizing Chair, *CAAD Futures 2027 Conference*, University of Calgary

2024 Scientific Chair, *The Association for Computer Aided Design in Architecture (ACADIA) Conference 2024*, University of Calgary

2021 Session Chair in Urban Analytics, *The 26th International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)*, Hong Kong

Peer Review

2026 – Reviewer, *Journal of Computational Design and Engineering*

2026 – Reviewer, *Canada Foundation for Innovation*

2026 – Reviewer, *Journal of Urban Affairs*

2025 – Reviewer, *Automation in Construction*

2025 – Reviewer, *Technology | Architecture + Design (TAD) Journal*

2025 – Reviewer, *Association of Collegiate Schools of Architecture (ACSA)* Annual Conference

2025 – Reviewer, *Discover Sustainability*

2024 – Reviewer, *Journal of Mechanical Design*, The American Society of Mechanical Engineers

2024 – Reviewer, *International Journal of Architectural Computing (IJAC)*, CAAD Futures Foundation

2023 – Reviewer, *The Association for Computer Aided Design in Architecture (ACADIA)* Conference

2022 – Reviewer, *Environment and Planning B: Urban Analytics and City Science*, Design Society

2019 – Reviewer, *The Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)* Conference

2019 – Reviewer, *The Ibero-American Society of Digital Graphics (SIGraDi)*

Certificates

2018 Mathematics for Machine Learning: Linear Algebra, Certified by Imperial College London and offered through Coursera

2018 Mathematics for Machine Learning: Multivariate Calculus, Certified by Imperial College London and offered through Coursera

Patents

2024 Media Control Device and System, *(Patent in USA, 11910130)*

2023 Building Layout Automation Reinforced by Physics Simulation as Constraints Solver, *(In the process of provisional patent in USA / Canada / Republic of Korea)*

2018 Diagrammatic Image Dataset Generation with Neural Networks, *(Provisional Patent in USA, 947010369930004051856O)*

2018 Custom Generative Systems with Adaptation Mechanisms, *(Provisional Patent in USA, 947010369930004051855 3)*

Memberships

2022 – Faculty Member, Association of Collegiate Schools of Architecture (ACSA)

2019 – Chartered Member, Society of Computational Design and Engineering Korea

2016 – Associate Member, Royal Institute of British Architects (RIBA)

2016 – Chartered Member, Architectural Institute of Korea (AIK)