

Jinmo Rhee

Address Carnegie Mellon University, Pittsburgh, PA, 15213.
Margaret Morrison Carnegie Hall, 402.
E-mail jinmor@andrew.cmu.edu
Phone +1 412 628 2948, +82 10 9187 2216
Website <http://www.jinmorhee.net>

Education

2019.09- Ph.D. student in Computational Design
Carnegie Mellon University School of Architecture, Pittsburgh, PA
2019.05 M.S. in Computational Design
Carnegie Mellon University School of Architecture, Pittsburgh, PA
2016.02 B.Arch. *With Honors*
Korea National University, Seoul, Korea *with Honors*

Licenses & Certificates

2018 Mathematics for Machine Learning: Linear Algebra
Certificated by Imperial College London and offered through Coursera
2018 Mathematics for Machine Learning: Multivariate Calculus
Certificated by Imperial College London and offered through Coursera
2014-2016 Royal Institute of British Architects (RIBA) Part II
66 Portland Palace, London W1B 1AD, England
2009-2011 Royal Institute of British Architects (RIBA) Part I
66 Portland Palace, London W1B 1AD, England

Work Experiences

2020- CRAIDL (Creative AI and Design Launchpad) Co-Founders, Carnegie Mellon University
2018 -2020 CoDeLab Manager, Carnegie Mellon University
2018.05 Apartment Layout Design with Machine Learning, Pittsburgh
Carnegie Mellon University School of Architecture, Pittsburgh, PA
Layout analysis using machine learning
Generative algorithm for apartment complex design
Multiple optimization algorithm for apartment complex design
2015-2019 Interior and Branding Architect
JinmoRhee, Seoul, Korea
Design competition: bus stop in Museum San complex
Youlhyeon 300-42 renovation,
Cafe Ch.Gonggahm interior
SN boarding school renovation visualization

- Ann' Garden Florist Training Center interior
- ACE Security brand design
- Pooreun community house design proposal
- 2017.01 **Project Architect**
Urban Operation, Seoul, Korea
Design competition: art complex Pyeongchang-dong
- 2013-2017 **Architectural Assistant**
SSWA Architects, Seoul, Korea
Jang's house in Sindang-dong
Community center renovation: Gongreung 1, Wolgye 1, Siheung 5
Gasan cultural community center
Folly park of Geumcheon park renovation
Han river architectural imagination exhibition
Hado elderly welfare center, competition winning project
House of Yeesang, cultural space in memory of poet yeesang
- 2015.07 **Project Manager, Architectural Assistant**
ArchiWorkshop, Seoul, Korea
International idea competition of the Jamsil sports complex in Seoul
Eunpyeong residence for the disabled
Mapo social box complex
- 2013.09 **Architectural Assistant**
MLNP Architects, Seoul, Korea
Kazakhstan Astana Tower

Teaching Experiences

- 2019.09- **Studio Instructor / Graduate Instructor**
Carnegie Mellon University School of Architecture, Pittsburgh, PA
Scripting and Parametric Design (48-724)
Fundamentals of Computational Design (62-275)
Architecture Design Studio: Foundation I (48-100)
- 2017-2019 **Teaching Assistant**
Carnegie Mellon University School of Architecture, Pittsburgh, PA
MSCD Pre-Thesis II (48-716)
Digital Skill Workshop 2018 and 2019 (48-689)
Digital Media I and II (48-120, 48-125, 62-122, 62-123)
Generative Modeling (48-783)
- 2017.05 **Guest Speaker for Intermediate Design Studio, "Digital to Physical"**
Sookmyung Women's University, Seoul, Korea
- 2017.05 **Guest Speaker for Advanced Design Studio, "Digital to Physical"**

Korea National University, Seoul, Korea

2013.04 Instructor of Rhinoceros3D and Grasshopper Workshop
Ein Architects & Engineering, 181, Yangjaechun-ro, Gangnam-gu, Seoul

Publications and Exhibitions

- Papers
- 2020 Jinmo Rhee, Pedro Veloso, Ramesh Krishnamurti, "Integrating Building Footprint Prediction and Building Massing" in *25th International Conference of the Association for Computer-Aided Architectural Design Research in Asia*, (CAADRIA, Bangkok, 2020)
 - 2019 Jinmo Rhee, Jae-won Chung, "A Study of Automation of Housing Design Method Using Artificial Intelligence" in *Annual Conference of Architectural Institute of Korea, 2019* (Best Paper Awarded)
 - 2019 Jinmo Rhee, Jae-won Chung, "Applicability of Artificial Intelligence in Apartment Complex Design" in *Annual Conference of Architectural Institute of Korea, 2019*
 - 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)
 - 2019 Pedro Veloso, Jinmo Rhee, Ramesh Krishnamurti, "Multi-agent Space Planning A literature review (2008-2017)" in *Hello Cultures* (CAAD FUTURES, Daejeon, 2019)
 - 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, 2011)
- Books
- 2020 Jinmo Rhee, *Context-rich Urban Analysis Using Machine Learning* (Eliva Press, 2020)
 - 2020 Jinmo Rhee, *Artificial Intelligence for Architecture* (Wooribook, 2020)
 - 2020 Jinmo Rhee, *Architectural Artificial Intelligence* (Bookk, 2020)
 - 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, 2019)
 - 2016 Jinmo Rhee, *Rhino3D for Architecture* (Wooribook, 2016)
- Exhibition
- 2019 Invited Artist, "Context-rich Urban Analysis and Generation Using Artificial Intelligence", The 2nd Special Exhibition for Korean Student in America by Korean Institute of Architects, Culture Station Seoul 284, Seoul, Korea
 - 2015 "Skydium and Jamsil Sports Complex Renovation Master Plan", Korea National University, Seoul, Korea
 - 2013 Invited Artist, "Aesthetics of the Nature" Munji Culture Center, Seoul
 - 2013 Entry Team Artist, "REAL DMZ 2013" Art Seonjae, Seoul

Patents

- 2018 Diagrammatic Image Dataset Generation with Neural Networks (Provisional Patent)
- 2018 Custom Generative Systems with Adaptation Mechanisms (Provisional Patent)

Honours and Awards

Awards	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 in Annual Conference of Architectural Institute of Korea, 2019
	2016	Honorable Mentions in Collections of Excellent Graduation Paper, Architectural Institute of Korea
	2014	Honorable Mentions in Architectural Structure Design Competition, The Korean Structural Engineers Association
	2010	Honorable Mentions in Jeju Architecture Awards, Jeju City Government
	2010	Honorable Mentions in Idea Competition of the Public Facility on Kwanghwamoon Plaza, Seoul Design Foundation
Scholarship	2021-2022	Architectural Design Human Resource Development Project, Korea Agency for Infrastructure Technology Advancement
	2018 -2020	Graduate Student Small Project Help (GuSH) funds, Carnegie Mellon University
	2019	SoA + GSA International Conference Travel Grants, Carnegie Mellon University
	2017-2019	Merit-based Admission Scholarship, MSCD, Carnegie Mellon University
	2015	Kookmin Bank Academic Scholarship
	2010-2015	Academic Performance Scholarship, Korea National University

Additional Information

Memberships	Associate Member, RIBA (Royal Institute of British Architects)
	Chartered Member, Architectural Institute of Korea
	Chartered Member, Society of Computational Design and Engineering
Languages	English(Proficient), Korean(Native)
Programming	Python, JavaScript, HTML, C#, CSS
Packages	Tensorflow, Pytorch, Keras, Scikit-Learn, Open CV
Software	Autodesk AutoCAD, Maya, 3ds Max, Revit
	McKneel Rhinoceros, Grasshopper
	Adobe Photoshop, Illustrator, InDesign, After Effects, Premiere Pro
	ABB RobotStudio, HAL