CHEOLHEE PARK

+82 10 9248 2485 | park112368@gmail.com
https://parkcheolhee-lab.github.io/testbed/
https://github.com/parkcheolhee-lab

SUMMARY

With a background in architecture and a foundation in computational geometry, I worked as a software engineer at a PropTech startup, developing geometry processing, spatial data pipelines, and machine learning applications for architectural design. I have built design exploration engines for apartment feasibility analysis, small housing design, and LLM-based office layout generation, bridging architecture with computational methods.

EXPERIENCE

Research Intern @ *Visual Media Lab*   **Dec 2025 – Present**

As a research intern at the Visual Media Lab of KAIST, I contributed to the development of a multimodal virtual space automation system funded by KOCCA, focusing on converting single-image inputs into 3D object meshes, placing them in virtual scenes, and applying a rearrangement technique to correct implausible object layouts.

Software Engineer @ *Spacewalk*   **Jan 2022 – Nov 2025**

At Spacewalk, I worked as a software engineer, conducting research and development to productionize geometric algorithms for deployment in real-world applications. My contributions included developing *PlanNext*, an LLM-based office layout automation engine; rebuilding *LBDeveloper*, an apartment placement and feasibility analysis service; and advancing and maintaining *Landbook*, a platform for small housing planning exploration. Also, I created Rhino Grasshopper plugins to support in-house architects at BOUNDLESS Architects.

Architectural Design Intern @ *S.E.A Architects*   **Jun 2019 – Jul 2019**

I worked as an architectural design intern, supporting design development through drawings and visualizations, conducting site analysis and feasibility studies, and contributing to competitions with concept and schematic design proposals.

Research Intern @ *DART lab*   **Mar 2018 – Apr 2019**

As a research intern at DART (Digital Association of Research & Technology for Architecture) of KNUT, I assisted with design studies, building 3D parametric models using Rhino and Grasshopper to support architectural and urban design.

EDUCATION

Korea National Open University
Bachelor of Computer Science - BCS
Grade: 4.20 / 4.50
Mar 2025 - Present

Korea National University of Transportation
Bachelor of Architecture - BArch
Grade: 3.84 / 4.50
Mar 2013 - Feb 2021

CERTIFICATION

ENCORE Playdata
Project-Based Training Program for Data Scientists
Certificate of Completion
May 2021 - Nov 2021

SAMOO Architects & Engineers
Samoo Design Workshop (SDW) 2020
Certificate of Completion
Aug 2020

Korea Institute of Construction Technology Education
Building Information Modeling Professional Course
Certificate of Completion
Dec 2020 - Mar 2021

Chiangmai University
International Urban Regeneration Workshop
Certificate of Completion
Dec 2018

AWARDS

Korea Iron & Steel Association
Steel Modular Architecture Competition
Encouragement Award
Nov 2020

The Korean Institute of Culture Architecture
Next Generation Cultural Space Competition
Special Selection
Nov 2019

Architectural Institute of Korea
Academic Presentation Conference
Excellence Prize
Nov 2020

Korea Railroad (KORAIL)
Korea Railroad Architecture Competition
Grand Prize (2nd)
Oct 2019

Korea National University of Transportation
Graduation Exhibition
Grand Prize (3rd)
Jun 2020

SKILLS

Machine Learning: Python, PyTorch, TorchGeometric, HuggingFace **Geometry:** Shapely, Three.js, Rhino, Grasshopper, AutoCAD, SketchUp, Autodesk Revit **Frontend:** Javascript, Typescript **Database:** PostgreSQL, PostGIS **DevOps:** AWS S3, EC2, ECR, Docker, Github Actions **Collaboration:** Git, Github, JIRA, Slack **API Development:** FastAPI, Flask **Design:** Adobe Photoshop