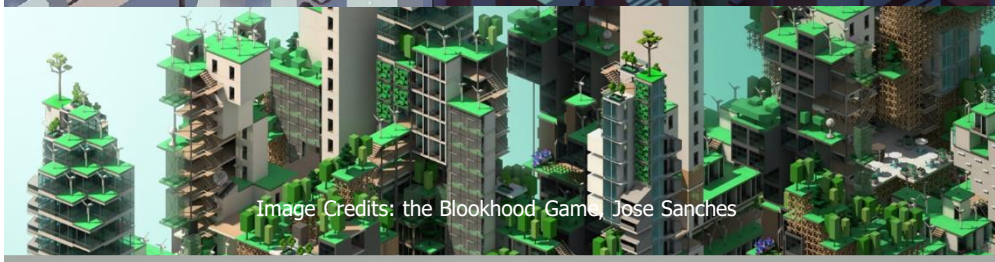
Gamification of Generative Design

For Combinatorial Generation of Modular Designs



Background and aim:

Participatory design is a necessity especially when multiple stakeholders are to be involved in design and operation of a building. Gamification of design into a combinatorial configuration process provides an interactive medium for stakeholders to be included in decision-making, explore the vast possibilities of modular systems, and easily co-create valid designs.

Research question:

How to formalize spatial design process as a participatory game?

Design objective:

To design and prototype toolsets and tile-sets for combinatorial design games aimed at modular assemblies.

Methods:

- Geometric Design and Tessellation
- Computational Topology & Geometry (optionally in Python)
- Gamification and Playful Learning
- Ergonomics
- Participatory Architectural Spatial Design

Building Technology Graduation

Theme: Computational Design/Generative Design

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