

Kathy Wang

AR/VR Designer





Born in Shanghai



Brooklyn, New York

Pratt Institute  
Bachelor of Industrial Design,  
Psychology minor



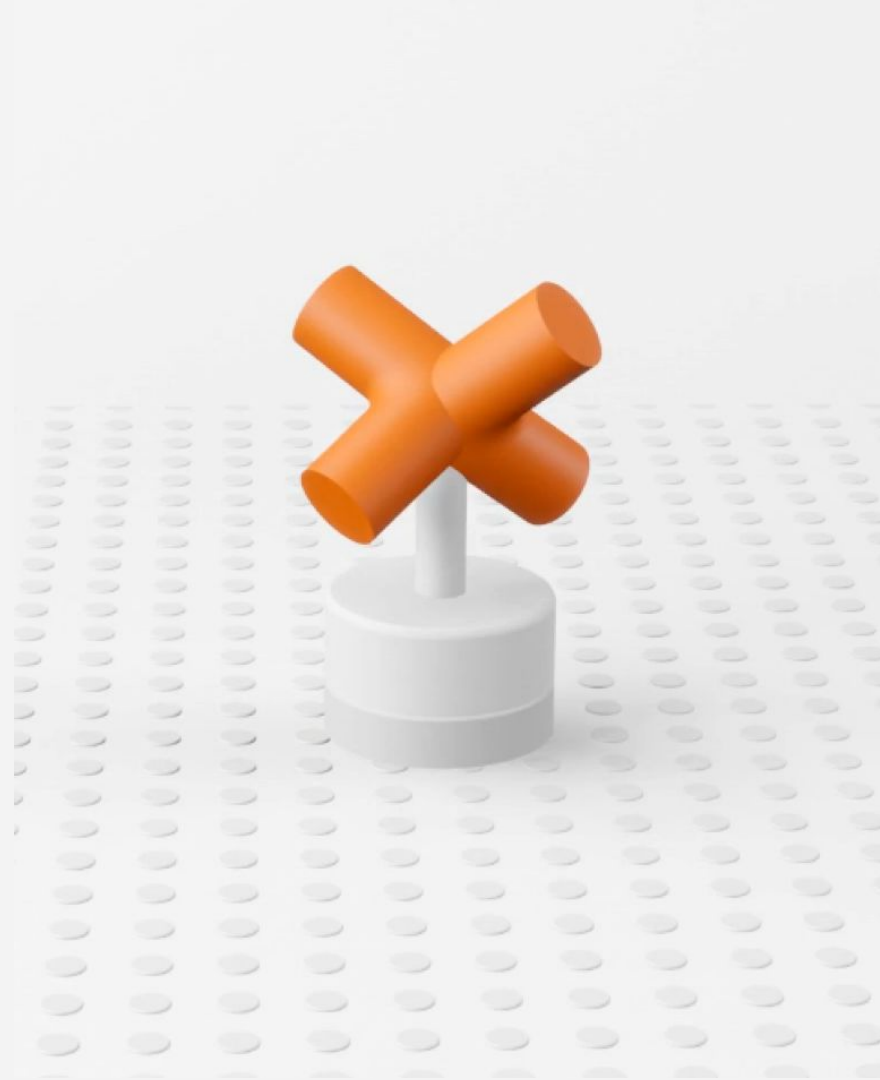
San Francisco Bay Area

UC Berkeley  
School of Engineering  
Master of Design



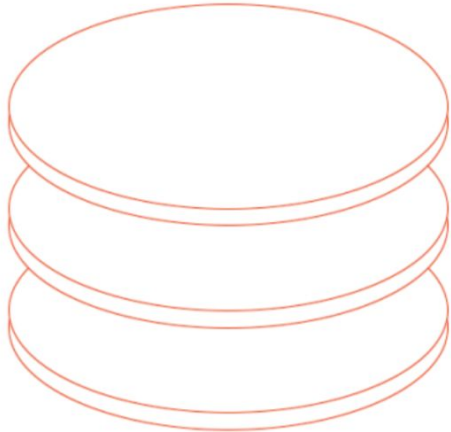
# Modular Senses

Aug 2022 - Dec 2022



# modular





Functionality Module

Core Module

Tracking Module



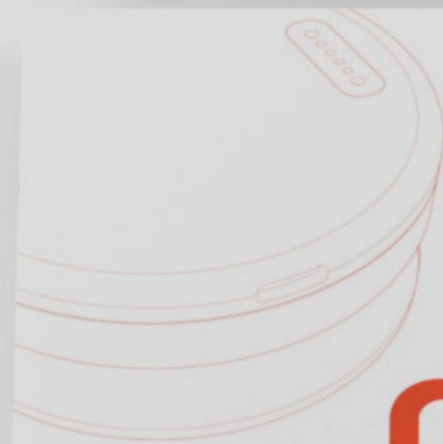


Core Module

Tracking Module

Functionality Module

Functionality Module

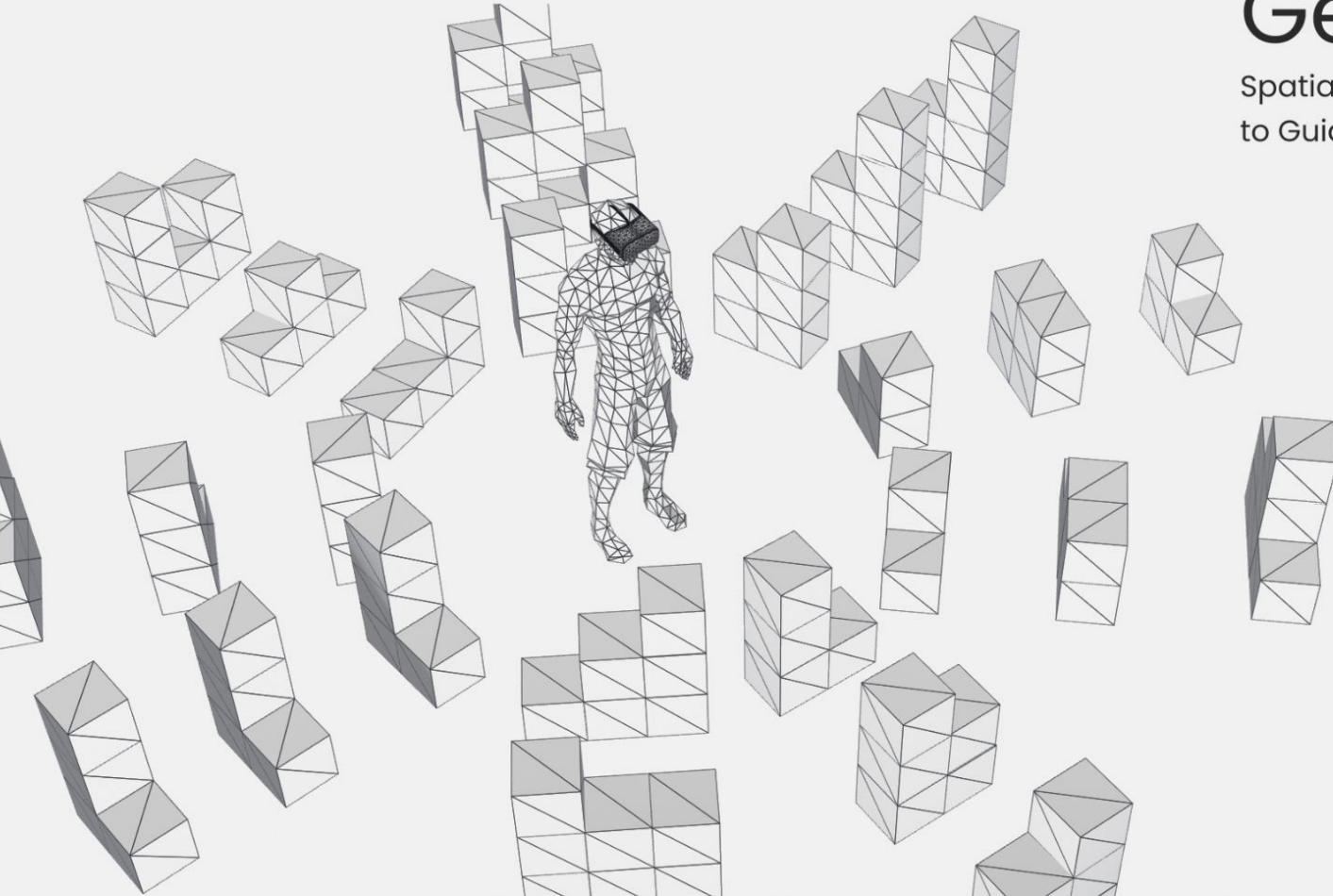


Sensing solution made for AR/VR

# modular

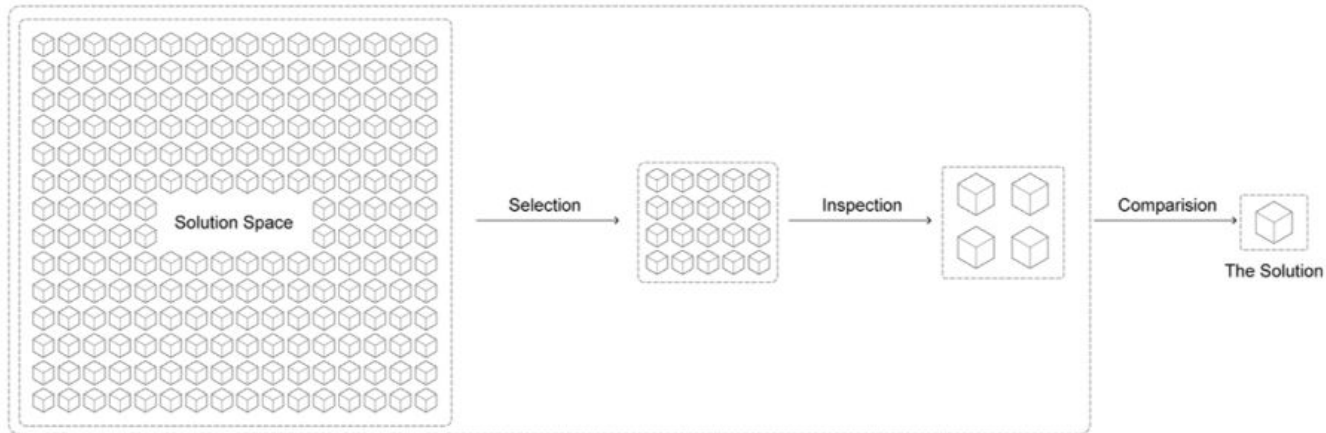
# GeneratiVR

Spatial Interaction in Virtual Reality  
to Guide Generative Design



# ABOUT

We present an interactive system where users can directly interact with the candidate designs as a method for guiding their exploration of a design space from a generative design system. We hope that the connection of these VR interactions with generative design provides humans with a better sense of how their designs might fit into the relevant environment as well as a possible future mechanism for providing generative algorithms with richer human feedback.



Generative Design Workflows (Image from Keshavarzi, Mohammad et al.)



# SYSTEM OVERVIEW

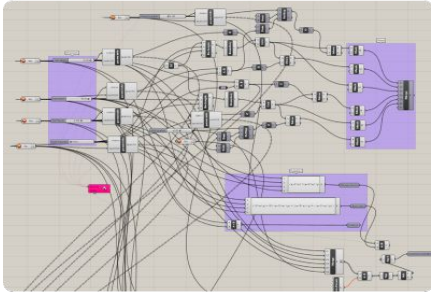
Explore



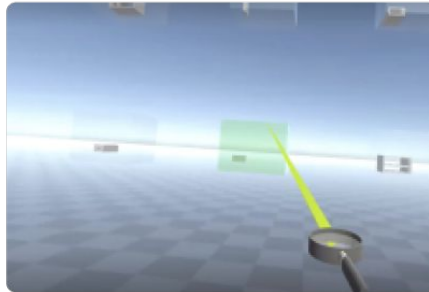
Evaluate



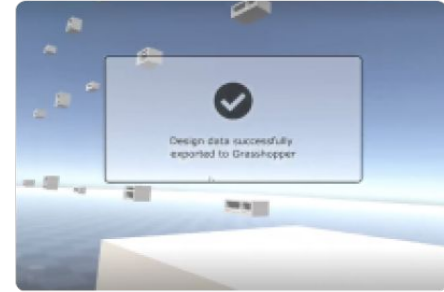
Re-Generate



Grasshopper defines a parametric model and takes a generative algorithm to generate a design solution space



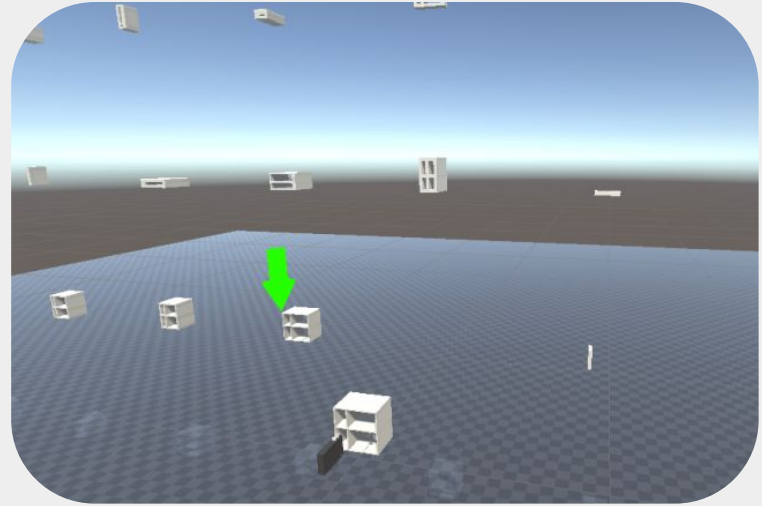
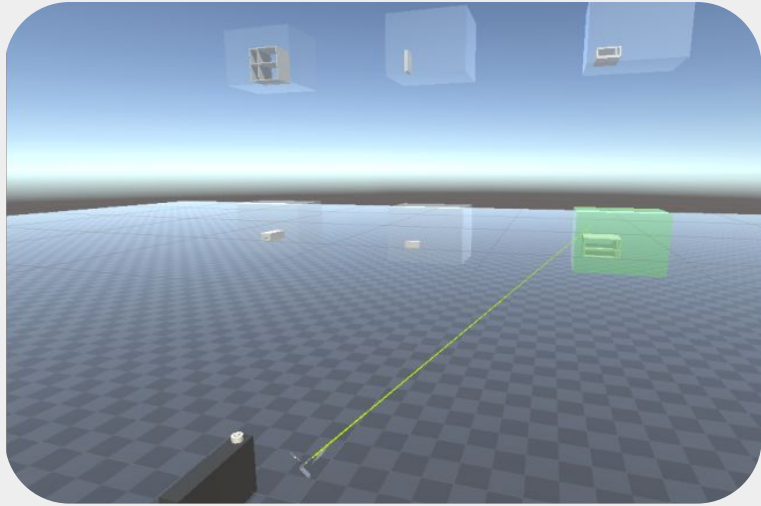
User explores the design space and filters the design options through VR interaction in Unity



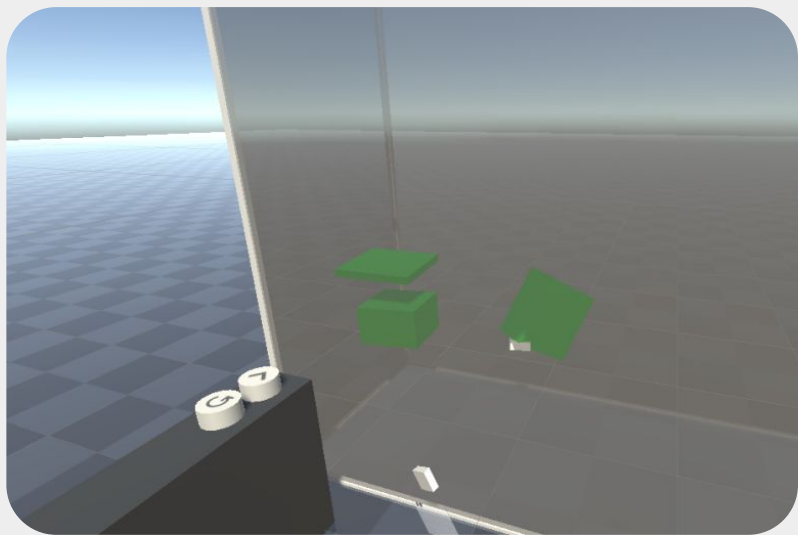
Unity sends the parameters of the selected designs back to the generative algorithm



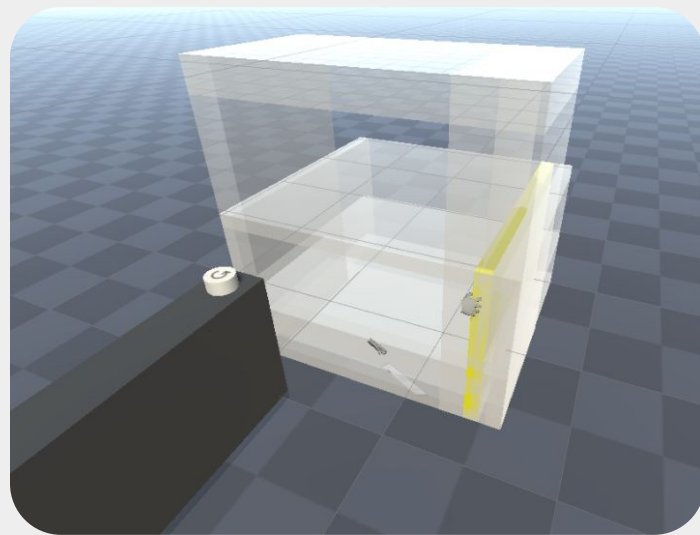
## Grid-Based Design Gallery



Functionality Filter



Direct Manipulation Filter



P. S. DON'T  
LOOK

BLOOD FOR  
FORGIVENESS

P. S. DON'T  
LOOK

BLOOD FOR  
FORGIVENESS



# Dog Pack

## An Augmented Reality Art Experience

Dog Pack is an augmented reality environment that uses the Institute of Contemporary Art SF as a site for exploring Dogpatch neighborhood lore in a fantastical and fabulative way. The work combines virtual objects with the physical space to create a hybrid ecosystem where visitors engage in a participatory artwork.

