

# Procedural Level Generation for Augmented Reality Games

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### Need for PCG in Augmented Reality

## Beyond Machine Vision Techniques

Semantic understanding of world Believable embedding of virtual assets Player interactions with real world

## Players can influence level generation process

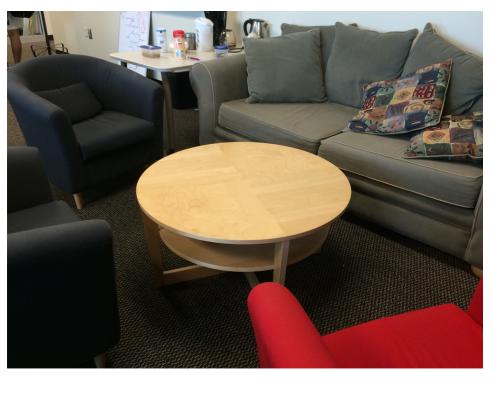
Rearrangement of furniture Introducing new elements

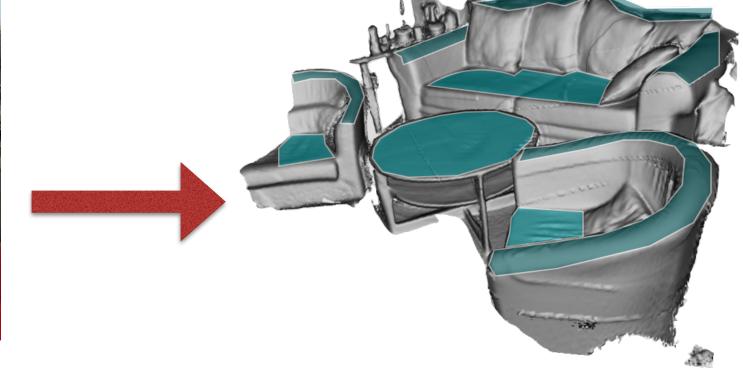
## Rethinking heuristics in a mixed reality context

Physical Movement
Player Reach & Navigation
Eye tracking

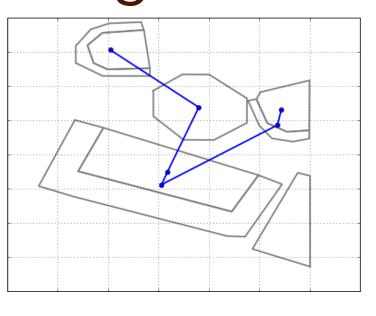
#### Our Process

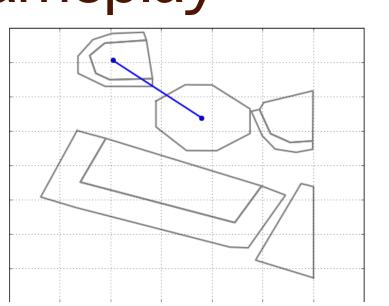
Playable Surface Detection



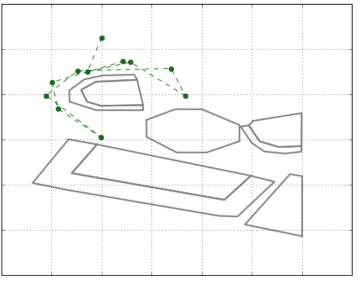


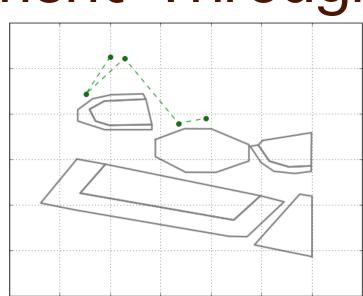
#### Evaluation of Heuristics Length of Gameplay





Player Movement Through Physical Space





#### Generating Virtual Elements

