

# Can an Unknowing Participant distinguish between Procedurally generated and Human designed Interiors? - WIP title

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*Abstract*—What's the problem? What am I looking at? How does that help solve the problem?

Opening, Challenge, Action, Resolution

Decorating an interior can be time consuming. *Define time consuming?*

Attempt to see if procedurally generated interiors can be perceived as human designed. Comparing the two together and see if participants prefer the procedurally generated designs.

## I. INTRODUCTION

What is Procedural generation? What specifically is Procedural interior generation? Explain more why this could be a valuable tool for games?

Why should it be compared to human created interiors?

## II. BACKGROUND & SUPPORTING LITERATURE

Go into a level of detail about how procedural interior generation can be done. (Different methods etc)  
Paper that I read. Only writing this to test that my .bib file is working. [1]

## III. RESEARCH QUESTION

From the above sources, I have formed **actual research question that's totally not wip anymore**

*A. hypothesis & null hypothesis*

## IV. ARTIFACT

*A. What will be made*

AI that procedurally generates interior at runtime in a pre-defined room size and access to pre-made furniture assets. Will be later compared with human designed interiors (being given the same room size and assets)

*B. How will I ensure Quality*

Quality control. Roadmap? Unit Testing? Integration testing?

*C. How will I create it*

The AI will be made in the Unity game engine (Version 2020.3.12f1)

*D. Why will this answer the questions*

## V. RESEARCH METHODOLOGY

*A. Experimental Design*

*B. Limitations*

Time, resources

*C. Sampling Plan*

Sample size, sampling method

*D. Data management plan*

Managing, collecting, & storing data

*E. Data Analysis*

*F. Ethical Considerations*

## VI. APPENDIX

Data analysis code, supporting screenshots, list of unit tests & testing plan

## REFERENCES

- [1] T. Germer and M. Schwarz, "Procedural arrangement of furniture for real-time walkthroughs," *Computer Graphics Forum*, vol. 28, no. 8, pp. 2068 – 2078, 2009.