BUILDING A HUMAN SIMULATION BY LEVERAGING LARGE LANGUAGE MODELS

Topic Summer 2024

This project aims to deliver a revolutionary human simulation platform that uses state-of-the-art language models for predicting human interaction with built environments. Some preliminary studies have suggested the use of LLMs for human subject studies, and other studies have applied LLM to social games. There has been some successful work on how to engineer an LLM to make decisions and interact with each other.

Scope of the Project:

The project's scope includes:
- Creating a software prototype, generating a heatmap of human presence.
- Integrating the tool into Rhino using the Grasshopper platform (CAD software).
- Comparing the developed prototype with existing crowd simulation software.

Expected Outcome:

We expect a working prototype that gets a 3D model, runs a simulation, and produces a heatmap.

What Can You Expect From Us:

We are experienced architects and developers and will ensure a stimulating research environment, comprehensive mentoring, and the opportunity to contribute to a pioneering project at the forefront of Artificial Intelligence and Architecture.

What We Expect From You:

We expect you to have experience programming with Python, 3D, and agent-based simulations. Prior experience with LLMs and crowd simulation, as well as knowledge of Grasshopper and CDP, will be beneficial.

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