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Machines of The Absurd: Leveraging Generative AI for Creativity, Humor, and Playfulness

BY

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A THESIS SUBMITTED TO THE SCHOOL OF DESIGN, COLLEGE OF COMPUTING AND DIGITAL MEDIA OF DEPAUL UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
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MFA Thesis Verification Form

This thesis has been read and approved by the thesis committee below according to the requirements of the School of Design graduate program and DePaul University.

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Abstract

Machines of The Absurd is a collection of four projects exploring how generative AI can be leveraged for creativity, humor and playfulness.

1. neverOS — A node-based visual playground for interacting with large language models.
2. Other Calc — An iOS app with a calculator interface, where players can “calculate” text instead of numbers.
3. What Must Burn — An experiment where players type in text that can be dragged into a campfire to produce contextually appropriate sound effects.
4. Jazz vs Waffles — A turn-based comedy game, where players battle anything they type in.

(Any of the above links asking for an OpenAI API key can be accessed with this key: sk-proj-jYflYtMu610wnCjeCcvjT3BlbkFJdNpLMLM9N9P33LVdWf2Y)

Together, these projects make the case for generative AI as an invaluable tool for creativity, an eager improv comedy partner, and an exciting new frontier of play.

neverOS

neverOS is a node-based interface I made in Unity that provides an alternative way of interacting with LLMs. In contrast to a chat-based interface like ChatGPT, neverOS uses a visual layout with aesthetics that mimic old science fiction UIs like those found in *2001: A Space Odyssey* and *Alien.* To operate neverOS, users connect nodes together to create workflows in which text is processed by the LLM. For example, if a user connects input nodes with the text “cat” and “table” to a BLEND node, the BLEND node will output text that blends the concepts together such as, “a piece of furniture designed to resemble a cat, complete with a sleek, furry surface and playful, feline-shaped legs.” Other operator nodes include functions like INVERT, ANALYZE, ANALOGIZE, PERSONIFY, etc.. These can all be connected and automated together to create complex machines that process text in bizarre and unpredictable ways.

I primarily made neverOS as a playground to explore LLM conversations in a visual manner. I’m fond of mind maps and frequently try to visualize conversations as they’re happening. In real life, conversations are necessarily linear due to the nature of sound progressing through time. Texting conversations also mimic this linearity through vertical space. In neverOS, “conversations” do not need to happen linearly. Nodes can branch off into multiple simultaneous workflows. They can even bend back on themselves to create feedback loops.

neverOS was also a way for me to explore and address the counterintuitive fuzziness of LLMs. For over a century, science fiction has primed audiences to imagine AIs as logical entities, free of the emotions and values that shape human thought. For example, in Isaac Asimov’s *The Last Question*, the AIs are computers that answer any questions humans have. They answer in very precise terms and are primarily used for things like calculating flight paths. If the AI doesn’t know the answer, it says something like, “INSUFFICIENT DATA FOR

MEANINGFUL ANSWER". Even in *2001: A Space Odyssey*, when AI HAL 9000 deceives Dave, it is due to secret programming provided by other humans. In contrast, the AI we have today operates in a completely different way. If ChatGPT does not "know" the answer to a problem, it does not say "insufficient data", instead it says, "Certainly!" followed by a response of confident and authoritative bullshit. Unlike Asimov's multivac, ChatGPT doesn't say that it does not know the answer. And unlike HAL 9000, it is not intentionally deceiving the user due to a hidden directive. Instead, its response is closer to Harry G. Frankfurt's definition of bullshit, in that it has no relation to the truth.

Designing neverOS, I wanted to highlight this dissonance between our preconceptions of AIs as logical arbiters of truth and the reality of AIs as masterful bullshit artists. To do this, I designed the aesthetics to evoke old sci-fi UIs which presented AI with such computational rigidity. I did this through the use of scanlines, limited colors, a VCR font, static and beep boop sounds, and through the interface's vocabulary. I used technical-sounding terms throughout like concatenate, analogize, and invert.

Overall, I envisioned it as a toy disguised as a tool to create a playful experience of exploration and mimicry—the aesthetics of rigid computation presenting nonsense.

Other Calc

Other Calc is a mobile spin-off of neverOS envisioning yet another interface to interact with LLMs. Some of neverOS's operator nodes are calculation functions such as addition, division, square root, etc.. Working with James Ryan, another student who helped me develop it, I envisioned neverOS as a calculator app for iPhone—a calculator for words. You can multiply "morning coffee" by "Thomas Jefferson" and then divide the sum by "purple."

Unlike neverOS, it is much easier to see the absurdity of Other Cal—it's difficult to imagine a useful application of it. There is no correct answer for "medical" minus "zebra", but Other Calc will give you an answer nonetheless, and it will present it as authoritatively as a calculator presents the answer to 7 minus 3. In this way, it leans into the fact that LLMs are inherently absurd. They are uniquely capable of generating coherent text devoid of intentionality or meaning. They seamlessly weave between fact and fiction unaware of either. And they are uncaring.

What Must Burn

This is an experiment where players can type in a phrase, drag it into a campfire, and hear what sound it makes when it burns. For example, if you drag the word "car" into the fire, you will hear a car exploding and burning. Because players can type in anything, it requires an LLM to process the text and choose the most appropriate sound effect. There are about 20 easter eggs that create special interactions. For example, when the word "gravity" is dragged into the fire, everything in the scene begins to float.

Like all of these projects, players are required to type in text. I could have made it so that there's a preset list of words players could choose from, but there would be no point to using an LLM for that. Improv comedy frequently begins with a suggestion from the audience. This not only gives the cast members something to work with, but it also shows the audience that the scene wasn't written ahead of time—that it is indeed improvised. Similarly, to show the player that this wasn't all hard-coded in development, asking them to type in something shows them that their input is driving the gameplay. In this way, What Must Burn encourages a state of playful creativity, mixed with the thrill of fiery destruction.

Jazz vs Waffles

When I showed neverOS to friends, they frequently gravitated to the FIGHT node which simulated a turn-based battle between whatever two concepts they typed in. They wanted to see who would win: Nicolas Cage or An Angry Slice of Pizza? So, with the help of James Ryan again, I decided to build a whole game around that: Jazz vs Waffles is a turn-based fighting game that uses AI to let players battle whatever two things they type in.

I started making it a straight battler, similar to early Pokemon games. Everything would be just like a turn-based role playing game battle, but with characters co-created by the player and the AI. However, thinking about how I could further leverage the language part of the language model, I tried a quick experiment of adding narration and dialogue. This radically changed the experience of the game from a novel experiment, to something genuinely entertaining and funny. It was shocking to see how well the AI adapts its language and style to whatever two characters are battling. It's an incredibly eager and quick improv comedy partner, instantly willing to say "yes, and" to whatever the player throws at it.

From my experience with neverOS, I figured an ensemble approach would be the best. By this, I mean rather than having one AI system figure out everything, it made more sense to think of it as a team of AIs working together, each with their own specialty: a character creator, character illustrator, move designer, move animator, move analyst, narrative designer, DJ, item designer, narrator, and two actors. Together, these eleven different agents work together to create a single battle. Each includes its own settings, system message, and prompting methods.

I spent over 500 hours creating, revising, and fine-tuning these different systems to create a delicate balance of hard-coded choreography and free-wheeling AI improvisation. The result is similar to the magic of an improv comedy scene, where the AI builds a story off the player's suggestions. The affordances provided by the large language model creates a hugely expansive possibility space that would not have been possible otherwise.

Conclusion

Generative AI is currently an extremely controversial topic within the public consciousness. Many of these concerns are legitimate, especially with regards to generative AI's place within the context of capitalism. However, this new technology offers unimaginable potential for new forms of art and play, that no artist or game designer should ignore. The four projects of my collection offer a tiny glimpse into a future of AI-leveraged creativity.

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