Julia Axiuk 2025-04-11 CART 263

Instructor: Sabine Rosenberg

Reflection 02

Reflection 02: Martin Wattenberg

As technologies advance and expand our creative horizons, new avenues for artistic exploration, analysis and creation unfold. This builds a whole new world for artists to explore in both a technical and creative way. Martin Wattemberg is one such individual, using his previous knowledge in data analysis and visualisation to gain a new and deeper understanding of artificial intelligence and deep learning. He explains that his artwork "uses data in the broadest sense, from musical scores to collections of photographs, to fuel visual explorations of meaning. Most pieces are interactive, inviting the viewer to take part in the artwork either online or in gallery installations." This can range to a great number of projects, including 'Wind Map', which he describes as an 'artistic exploration' of the wind currents across the United States, implemented entirely with HTML and Javascript². Another example that implements more AI would be "Thinking Machine" from 2003, which is set up to look like a digital representation of a chess board. As the player plays against the bot, the thought process is displayed with a series of moving colorful lines across the board³. This is meant to give the player a visual understanding of the computer's mind, offering an interactive understanding of the mind of an Al. His works extend all the way back to 1997 with "Bewitched", which manifests itself as a series of interactive, animated 'inkblots." However, his involvement with Al and breaking boundaries with interactive digital media doesn't stop at art installations and projects, but also extends to his involvement with the Harvard "Insight and Interaction Lab', which aims to "understand the inner workings of AI systems," with research themes such as AI Interpretability, Human-Computer Interaction and Data Visualization. Moreover, he is a part-time member of 'PAIR', DeepMind's people and AI research initiative and Harvard professor.

Wattenberg's most recent finished work is the aforementioned 'Wind Map'. Wind map uses HTML and Javascript with data taken from the National Oceanic and Atmospheric Administration (NOAA), visualizing the wind data as swirls and cyclones across an image of the United States. Viewers can see information such as the top speed, average speed and is described as "a living portrait". Wattenberg collaborated with Fernanda Viegas for the project, and has since been exhibited at Museum of Modern Art in New York, and is "the first web artwork to be in MoMA's permanent collection". However, the artwork is also available on an interactive website, on which the user can zoom in and explore the various ever-changing patterns that appear before them, creating a simple yet hypnotic effect based on real-time data. However, Wattenberg's vision goes far beyond simply a representation of data. Instead, he explains that the idea came to him during the winter, when "wind was much

¹ https://www.bewitched.com/art.html

² https://www.bewitched.com/windmap.html

³ https://www.bewitched.com/chess.html

⁴ https://www.bewitched.com/bewitched.html

⁵ https://insight.seas.harvard.edu/

⁶ https://www.bewitched.com/windmap.html

⁷ https://www.bewitched.com/windmap.html

on our minds".⁸ While wind is something that we feel and see around us and experience everyday, it is often taken for granted and forgotten about. Yet, Wattenberg describes it as an "invisible, ancient source of energy [that] surrounds us—energy that powered the first explorations of the world, and that may be a key to the future", further explaining that the actual map itself can hold a very different feeling depending on the current weather situations, randing from soothing to ominous, if there is a looming hurricane.⁹ Wattenberg's ability to blend what most would consider to be factual, perhaps even 'boring' data into an emotional experience is unique, and is one example of the crossover that computation and artistic vision can coincide. While some could argue that there was no 'art' being created, the final result is clearly an artistic and emotional experience meant to evoke the same thing that a painting might in its viewer.

Works Cited

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⁸ https://www.bewitched.com/windmap.html

⁹ https://www.bewitched.com/windmap.html