Aaru

Rethinking the science of prediction through multi-agent systems.

June 2024   Aaru Team   Overview

Recent frameworks have emerged, able to create AI agents dispatchable to make graphs, write code, and search your inbox – all tasks with significant implications for productivity. However, we believe that agents are useful for far more than just everyday tasks. At Aaru, we've quietly explored the predictive capabilities of language-based agents in the simulation space, laying the groundwork for a generalist agent-based predictive system.

Dynamo is our flagship in political simulation. Dynamo is capable of predicting elections at a national level to modeling opinions on a subcircuit judge's past rulings. By ingesting census data, Dynamo replicates entire geographies for any customizable environment with a myriad of intelligent, demographically accurate agents, allowing for extremely efficient and cost-effective simulations of politics – more accurate than polling.

Lumen is our flagship in the domain of consumer simulation. Lumen is capable of modeling sentiment for A/B testing, marketing material, and more, bringing unparalleled insights to the consumer space. Using demographic data, Lumen recreates any customizable environment, within which it replicates entire target audiences.

Agents respond to questions and prompts by making observations, reasoning through thoughts, and drawing logical conclusions with no human bias. Furthermore, it's fully configurable: users can change the distribution of demographics, properties of the world that the agents exist in, and link simulations together.

This approach is powerful; while no singular agent is capable of accurate predictions, as more agents are used, Aaru converges on reality. We see Dynamo and Lumen as puzzle pieces, as we continue building out whole world simulation. Within two years, we will simulate the entire globe – from the way crops are grown in Ukraine, to how that impacts production of oil in Iraq, trade through the Strait of Malacca, and elections for the Mayor of Baltimore.

We recently raised a pre-seed from Kevin Hartz (A*), Cory Levy, and Ramtin Naimi (Abstract Ventures) – the formation date on our company certificate is 28 March 2024. Since then, we've begun pilots with multiple Fortune 500 companies and the Biden campaign, among others.

Source	Clinton	Trump
CBS News	52.33%	47.67%
ABC News / WS	52.22%	47.78%
Fox News	52.17%	47.83%
Seltzer & Co.	51.76%	48.24%
Rasmussen Reports (Avg)	50.43%	49.57%
Aaru Dynamo 0.5	51.35%	48.65%
2016 General Election	51.12%	48.88%

2016 General Election (National Preference)

Source	Baker	Gonzalez
Mass Inc	73.12%	26.88%
Mass Inc #2	73.91%	26.09%
Suffolk University	71.43%	28.57%
YouGov (The Economist)	70.65%	29.35%
Aaru Dynamo 0.5	67.15%	32.85%
2018 Gubernatorial Election	66.60%	33.40%

2018 Massachusetts Gubernatorial Election

Source	Goldman	O'Shea
Aaru Dynamo 0.6	63.75%	36.25%
2024 Runoff	63.20%	36.80%

2024 Texas 12th Congressional District GOP Primary Runoff Live Test (no publicly accessible polling)