

Product Preview

Aaru Dynamo

We're excited to show the current prototype for Aaru Dynamo— a unified, agentic system for predictive simulations



April 2024

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Product

We've been impressed with the successful utilization of artificially intelligent, language based agents being applied to solve different tasks. Recently, frameworks like Langchain and AutoGen have been able to create artificially-intelligent language-based 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 political space, laying the groundwork for a generalist agent-based predictive system.

Dynamo is our flagship in political simulation. Dynamo is an intelligent system capable of anything from 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 using our proprietary data pipelines. Next, Dynamo simulates any scenario with a myriad of intelligent, demographically accurate agents.

This approach is powerful; while no singular agent is capable of predicting and modeling the real world, as more agents are used, Dynamo begins to converge on the real world. Through our testing, we've found these agents surpass polls in accuracy with a fraction of the time and cost of real polling.

Agents respond to questions and prompts by making observations, reasoning through thoughts, and drawing conclusions with **logical** rationales. 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. While we intend to continue rigorously testing our models with trusted political entities before public release, we would like to provide a preview of some of our backtest data below, executed on Dynamo 0.5.

Source	Biden	Trump
TIPP Insights	52.58%	47.42%
SurveyMonkey	53.61%	46.39%
Research Co.	54.35%	45.65%
YouGov (The Economist)	55.21%	44.79%
Aaru Dynamo 0.5	53.09%	46.91%
2020 General Election	52.25%	47.74%

2020 General Election (National Preference)

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

