Essay Challenge

On the Creation of Intelligence in Virtual Worlds

The universe led to the creation of intelligence within billions of years. As impressive as this achievement may be, Lab42's mission is to create human-level artificial intelligence much faster.

In Lab42's last [essay challenge on the principles of human-level AI](#), several participants proposed the creation of virtual worlds to develop human-level AI. To teach AI agents to think like humans, virtual environments offer many advantages over the real world: parallel simulations allow faster learning, algorithms can be evolutionarily improved, and virtual worlds are changeable in every way, so we can create worlds that are entirely tailored to the problem at hand. Therefore, in this essay challenge, we ask you the following question:

Which properties and structures must a virtual world have to enable the successful creation of human-level artificial intelligence?

This year, Lab42 is dedicated to building a virtual world that enables the development of agents with human-level AI. We do not aim for the complete representation of the real world but for a minimally complex virtual environment with only the properties and structures necessary for developing human-level AI. This essay challenge seeks convincing arguments for which properties and structures are required to achieve this goal in such virtual worlds.

We value novelty, insightfulness, and convincing arguments. Bear in mind: the virtual world should be created this year. Hence, the concept should be applicable and practically realizable. Be as specific as possible and state concretely how and why the world should be designed in a certain way. Whether you answer the question from a biological, computational, mathematical, neuroscientific, philosophical, psychological, social, or any other perspective is up to you.

With this in mind, we challenge you to write an essay of 2'000 to 3'000 words. Hand in your essay at lab42.global/essay-virtualworlds by 23:59 GMT on March 31, 2023, and win fame and great prizes.

The best essays will be rewarded as follows:

1st place: USD 1'000
2nd place: USD 500
3rd place: USD 250

As in our last Essay Challenge, we would like to publish the best essays on our website. Please read the submission guidelines below before starting to write. We wish you good luck, creativity, and successful idea-finding!

Submission Guidelines

- Participation is open to everyone; you can participate individually or as a team.

- Essays are accepted in English and German.

- The essay must be between 2'000 and 3'000 words long (footnotes and title page not included).

- The title page must contain the following information: First and last name, date, email address, and title.

- All other pages must not contain personal information to allow for anonymous evaluation.

- All citations and sources must be indicated.

- The essay must not have been published elsewhere.

- The submission of AI-generated text is not allowed (except for individual citations).

- Applicants agree that Mindfire may publish the texts and publicly announce the winners' names.

- Submit your essay as a pdf at lab42.global/essay-virtualworlds by 23:59 GMT on March 31, 2023.

- Winners will be notified at the latest by April 30, 2023.