OpenAI . Opens Our Eyes



Team 46692A The Chaotic Calibotz San Jose, CA

By Ellanya, Diya, Sathvika, Shreshta, Sruthi

SopenAI What is it?

OpenAl is a company that works with artificial intelligence. They have created tools that help people in many ways, such as giving information, training, and understanding different perspectives. OpenAl has developed a process over the years that has helped them succeed. One of their newest technologies, ChatGPT, is very advanced and can understand information better than any other system before it. ChatGPT is a tool that encourages creativity and experimentation. OpenAl's goal is to use Al to make the world a better place.









Other companies have been inspired by OpenAl's ChatGPT and have created similar tools like Bing Chat and Bard. DALL-E is another tool created by OpenAl that can make realistic images based on words or phrases. It's named after Salvador Dali, a famous Spanish artist, and the character Wall-E from a Disney movie. DALL-E uses a lot of different art styles to make images that look real. It's useful for things like making storyboards, designing products, and creating educational materials. Overall, OpenAl is a leader in the field of artificial intelligence. They are always working to make Al better and push the boundaries of what it can do.

quence. And there's like a lot of other rearview mirror. We still have a lot of hard engineering work to do, undamentally that's it, ar but I'm pretty confident we're going to be able to. And now the e process of playing the questions are like, what should we build? And how and why and what data should we train on and how do we train the total and why and what data should we train on and how do we build systems not just xt word, these models that can do these like phenomenally impressive things, but that we and understanding of can ensure do the things that we want and that understand the concepts of truth and falsehood and you know that the the stand concepts of truth and falsehood and, you know, alignment with s maybe not perfectly human values and misalignment with human values. One of the pieces of research that we put out last year that I was most proud of and most excited ab

Gathering Information

To research OpenAl, we started off by looking on their website for any interviews, details, or images of their Engineering Design Process (EDP). Soon, we were unable to locate any prominent information there and resorted to looking at outside interviews with the CEO of OpenAI, Sam Altman. Finally, we found a TED-Ed interview, The Race to Build AI that Benefits Humanity with Sam Altman, where he talks about the mission of OpenAI and how his team develops their design. He mentions that while solving their problems they ask questions such as What would we build? How would our AI show the truth and not falsehoods? In addition, we also viewed multiple articles and blogs, where Altman shares that "OpenAl stove massive amount of data to train ChatGPT." He recognizes that OpenAl is not • perfect and it has its pros and cons. Overall, by researching OpenAI, we were able to understand the mission, vision, and strategies it uses in its company.



, some of it good, behavior I want I don't want this formation from th In teach the model, behave more like

Engineering Design Process

**Note: EDP = Engineering Design Process

OpenAI's EDP

The Engineering Design Process is a structured and organized approach to designing and developing a solution to a problem. OpenAl's Engineering Design Process consists of eight steps that aim to identify a research problem, review existing work, conceptualize solutions, create detailed designs, develop algorithms, implement and code the solution, test and evaluate its performance, refine it based on test results, document the final solution, and release the product.



When we're trying to solve a problem, it's important to follow a set of steps that we created at the beginning of the season. First, we need to define the problem. Second, identify the criteria and limitations to find a solution. Third, brainstorm ideas to solve the problem. Fourth, choose the best solution and evaluate its pros and cons. Fifth, create a prototype of the solution with available materials. Sixth, test and experiment with the prototype and note what could be improved. Seventh, improve the prototype by repeating the design. Finally, share the solution with others and get feedback to refine your understanding of the problem. Each step is critical in developing an innovative and effective solution.

Identify

Define the AI Challenge

Oppurtunity

sign and Develop th

n to Meet Criteri



Application

Our robot kept falling over during matches. We tried to fix it by moving the brain and battery pack to the middle or either side of the robot. So, we considered the pros and cons of each idea.

If we put the brain and battery pack in the middle, the robot wouldn't fall over anymore, and it would be easier to fix. But, we wouldn't be able to put the robot back up if it fell over, and the wires would be hard to reach. If we put the brain and battery pack on the sides, the robot wouldn't be too heavy on one side and it would be easier to fix. But, other robots could push it over, and it would be easier to break. We decided to put the brain and battery pack in the middle because it was the best idea. We tried it out and it worked! We also added some things to our robot to make sure it wouldn't fall over again. We keep working on our robot to make it even better.



Robot that flipped over

Balanced Weight Robot

Stabilizers & Anti-Flip Robot

Exploring

Interests

OpenAl values precision and communication. They assess operations, project future trends, and communicate effectively to create a cohesive plan. This approach ensures greater accuracy and keeps them at the forefront of Al research.

The company also designates roles among their employees to work efficiently and timely. In terms of allocating work, our team observes what our members are most comfortable and skilled in. Shreshta and Sruthi have extensive coding backgrounds with languages including Python. In the drive and build, Diya and Sathvika both love getting hands-on with robot controls. Ellanya and Shreshta share immense ardor for design. All these characteristics eased our first-year journey into VRC, enabling us to work past difficulties.



Career Readiness

For success, we must connect to our careers and skills, allocate team roles, communicate effectively, and take responsibility. Assigning roles based on different factors leads to smoother team operations. We prioritize listening to different perspectives, sharing our own, and integrating them into our work ethic. Honesty, integrity, and proactiveness help avoid miscommunication and misunderstandings both in and out of the field of robotics. With all these amazing skills we develop within this team, we aspire to invest in STEM-related careers.



References

The TED Interview: The race to build AI that benefits humanity with Sam Altman (from April 2021) | TED Talk



https://openai.com/

OpenAI