

An Overview of Artificial Intelligence

The Good

- AI can collaborate effectively with humans.
- AI allows for smoother production: automation, repetitive tasks, and minimizing errors (2).
- AI can create solutions for problems that we could never imagine, and more solutions than we can come up with (3).

"While AI will radically alter how work gets done and who does it, the technology's larger impact will be in complementing and augmenting human capabilities, not replacing them." ~ Harvard Business Review



Image Credit: The Robot Report, <https://www.therobotreport.com/universal-robots-at-autodesk-for-human-robot-collaboration-in-construction/>

In this project called HIVE, humans manipulated the bamboo, which would be a difficult task for AI, and machines did the weaving, which would be a difficult task for humans, thus establishing effective teamwork (3).

This is a design for an aerial drone, created by an AI with only essential criteria, and it came up with the most ideal result. Conti references a flying squirrel's pelvis to highlight the nature-based design.



"It comes back to us with designs that we, by ourselves, never could've imagined. And the computer's coming up with this stuff all by itself -- no one ever drew anything, and it started completely from scratch. And by the way, it's no accident that the drone body looks just like the pelvis of a flying squirrel." ~ Maurice Conti

The Bad

- AI tends to be biased, which is a result of the biases of the people who develop it.
- Humans have limited control over AI.
- Ethics in regards to AI are unclear and questionable.

"An interest in ethical algorithms doesn't stop companies from assisting deeply unethical causes." ~ The Verge

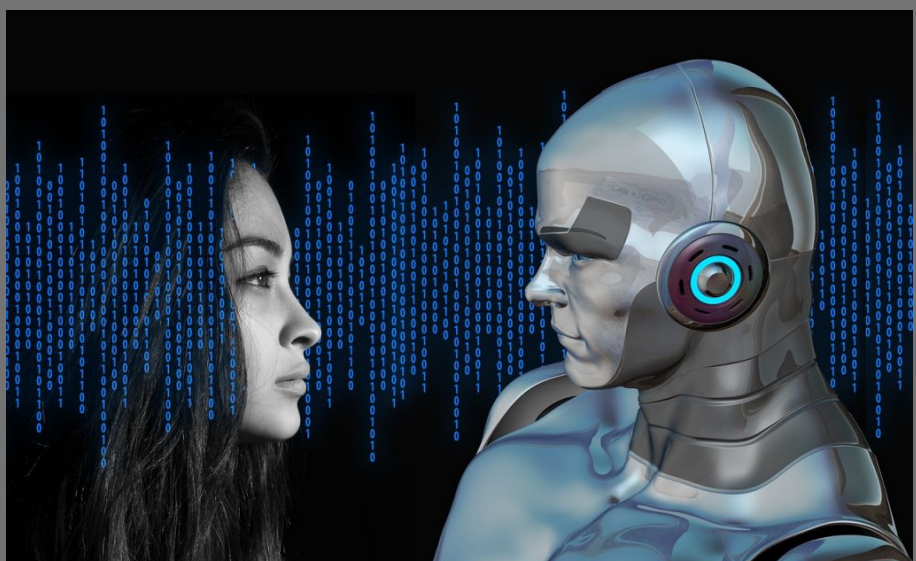


Image Credit: The New Stack, <https://thenewstack.io/a-practical-approach-to-detecting-and-correcting-bias-in-ai-systems/>

There have been incidents with AI failing to detect faces of people of color and providing users feedback that is considered very racist. A notorious example included some Asian people taking a picture, and the AI-produced message told them someone's eyes were closed (4).

The Future

Although there are some critical issues to work out with AI, the present and future of AI is extremely promising. If AI is able to collaborate with humans and perform tasks that lead to more efficiency and accuracy, humans may have more time in their personal lives for things like leisure and family, rather than having to work all the time. It will be crucial that we correct the biases present in AI and create clear and fair codes of ethics to ensure equality for everyone.

Citations



1. Wilson, H. James, and Paul R. Daugherty. "How Humans and Ai Are Working Together in 1,500 Companies." Harvard Business Review, Harvard Business Review, 19 Nov. 2019, <https://hbr.org/2018/07/collaborative-intelligence-humans-and-ai-are-joining-forces>.
2. Team, 10xDS. "Top 10 Benefits of Artificial Intelligence (AI): 10xDS." Exponential Digital Solutions, Exponential Digital Solutions, 19 Nov. 2021, <https://10xds.com/blog/benefits-of-artificial-intelligence-ai/>.
3. Conti, Maurice. "Transcript of 'The Incredible Inventions of Intuitive Ai.'" TED, TED Conferences, LLC., 6 Feb. 2017, https://www.ted.com/talks/maurice_conti_the_incredible_inventions_of_intuitive_ai/transcript?referrer=playlist-talks_on_artificial_intelligen#t-192391.
4. Vincent, James. "The Problem with Ai Ethics." The Verge, The Verge, 3 Apr. 2019, <https://www.theverge.com/2019/4/3/18293410/ai-artificial-intelligence-ethics-boards-charters-problem-big-tech>.