AI & RESEARCH



Revolution of Research

expertise!









Improving the Research with Al-based Algorithms

Facilitate the Synthesis and **Analysis of Complex Datasets**

Automate the Acquisition of Data

(Morales & All, 2023)

Morales, D., & All, I. F. (2023, July 19). Natural Language Processing: How A Computer Learns Language. IoT for All. https://www.iotforall.com/naturallanguage-processing-how-a-computerlearns-language

EXAMPLES



Human-**Centered Al** Research at **Stanford**

("Stanford HAI," 2022, Sept 19)

Hinman, Joseph (2021) [Vertical_all-white, Stanford HAI logo.] [Logo]. Stanford University https://hai.stanford.edu/sites/default/files/202 1-10/hai_1.png



Fusion Energy ("Google Deep Mind," 2022, Feb 16)

Herzog, A. (2021) [Interior of the TCV tokamak.] [Photograph]. © A. Herzog, EPFL Image Source-Credit: DeepMind and SPC/EPFL https://www.epfl.ch/research/domains/swiss-plasma-center/wp-content/uploads/2021/04/TCV_InterieurBaffles_Herzog_red.jpg Reference- https://www.deepmind.com/blog/accelerating-fusion-science-through-learned-plasma-control



Beki, Sevilay, et al. 2023, July 19. Retrieved from https://www.canva.com /design/https://www.ca nva.com/design/DAFpq4 l6V7s/3uqmaombgQ-ATwVM6OlbxA/edit

Deep Learning Indaba

("Deep Learning Indaba," 2023 Jan)

Deep Learning Indaba (2017 - 2023) [Footer logo, Deep Learning Indaba logo.] [Logo]. Copyright © Deep Learning Indaba 2017 -2023. https://deeplearningindaba.com/wptemplate/images/footer-logo.png



Agriculture

and Climate

Social Sciences and Humanitarian Research

Natural Language Processing (NLP)

Genomics and **Bioinformatics**

> **Finance** and **Economics**

Robotics and **Astrophysics**

Education

Healthcare and Medicine

("Artificial Intelligence (AI): Multidisciplinary Perspectives on Emerging Challenges, Opportunities, and Agenda for Research, Practice and Policy," 2019)

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Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. (2019, April). International Journal of Information

Management, 57. https://doi.org/10.1016/j.ijinfomgt.2019.08.002



The Pros and Cons of Al Usage in Research



CONS





PROS

Saving Time



Data Collection & Analysis



Faster Progress



Help for Brainstorming



Help for Citation



Improve the Quality

Unemployment



Damaging competition

Makes people lazier



Less creativity



Replacing human



Inequality -Unethical

(Top Advantages and **Disadvantages of Artificial** Intelligence [2023 Edition], 2021)



CAN I HELP **AI TOOLS**



Consensus

ChatPDF

Rabbit



ChatGPT

Elicit Paper QA

SciSpace

Research

Scite

Assistant

https://www.canva.com/

Designed and Created in Canva-

Top 7 Artificial Intelligence (AI) Tools in Scientific Research. ILovephD. https://www.ilovephd.com/top-7artificial-intelligence-ai-tools-inscientific-research/

R, Dr. Somasundaram. (2023, June 4).