# Task - 1

# Topic - AI application in Human resource management is creating biases

Technological emergence has a significant impression on several organizational operations including Human resource management. Artificial Intelligence or AI is one of the emerging technologies transforming business operations to a new level. As per a report, 80% of global organizations are using AI technology in some form within their HRM system (Brin, 2019). However, AI technology with its several applicability also brings the concern of biases. On the other hand, researchers suggested that AI is an impressive tool for removing bias. In this context, a study stated that the use of AI technology for hiring by HRM can be effective to avoid unconscious bias (Raveendra, Satish and Singh, 2020). Additionally, this study stated that biasfree hiring will ensure the quality and effectiveness of hiring and help any organization gain more advantages.

On the contrary, AI is also becoming a concern for algorithmic bias that puts limitations on its HRM uses for hiring applicants. As per a study, the retail giant Amazon utilized an AI-driven tool to review and sort applicant profiles and faced an issue of bias (Dastin, 2022). As per the study, the AI algorithm was ignoring applicant profiles which mentioned the term 'women' or 'female' while sorting. In this context, a book stated that the AI-integrated system of Amazon taught itself using the global data of IT profiles which have more males compared to the number of females working in several organizations and prefers male candidates over female candidates while sorting applicant profiles (Mehan, 2022). The book also mentioned that gender and race bias due to the AI algorithm happens again when Facebook allows advertisers on its platform to promote brands based on race and gender using AI technology. To solve such issues related to AI-based hiring by the HRM, researchers and developers have suggested several norms. In this respect, a study stated that the Algorithmic de-biasing technique is the best suited for mitigating the limitation in AI-driven tools (Raghavan et al., 2019). Utilizing bias-free AI tools can be very effective for a transparent and effective hiring system that can leverage HRM with benefits.

Successful search items	Unsuccessful search items
artificial intelligence for HR, SHRM.	Kodiyan, A.A., 2019. An overview of ethical issues in using AI systems in hiring with a case study of Amazon's AI based hiring tool. <i>Researchgate Preprint</i> , pp.1-19.

	Raveendra, P. V., Satish, Y. M. and Singh, P. (2020) "Changing landscape of recruitment industry: A study on the impact of Artificial Intelligence on eliminating hiring bias from recruitment and selection process," <i>Journal of computational and theoretical nanoscience</i> , 17(9), pp. 4404–4407. doi: 10.1166/jctn.2020.9086.	Yam, J. and Skorburg, J.A., 2021. From human resources to human rights: Impact assessments for hiring algorithms. <i>Ethics and Information Technology</i> , 23(4), pp.611-623.
-	Dastin, J. (2022) "Amazon scraps secret AI recruiting tool that showed bias against women," in <i>Ethics of Data and Analytics</i> . 1st Edition. Boca Raton: Auerbach Publications, pp. 296–299.	Cenite, M. (2015) "Google Books," in <i>The SAGE Guide to Key Issues in Mass Media Ethics and Law.</i> 2455 Teller Road, Thousand Oaks California 91320: SAGE Publications, Inc., pp. 847–858.
•	Mehan, J. E. (2022). "Artificial Intelligence - Ethical, Social and Security Impacts for the Present and the Future". United Kingdom: IT Governance Ltd.	Government Policy Toward Open Source Software. (2010). United States: Brookings Institution Press.
	Raghavan, M. <i>et al.</i> (2019) "Mitigating bias in algorithmic hiring: Evaluating claims and practices," <i>arXiv</i> [cs.CY]. Available at: http://arxiv.org/abs/1906.09208.	

Table 1: Unsuccessful and successful search results

The terms I used for searching the relevant literature are "AI", "Hiring", and "Bias". When I searched "AI creating bias in hiring", it provides relevant results in google Scholar as depicted below screenshots. Searching "Mitigating biases in AI hiring" also provides me with relevant results. However, searching with "bias-free AI hiring" does not provide relevant studies. The reason is due to the specific terms that I used in previous successful searches such as creating bias or mitigating bias.

# References

Brin, D. W. (2019) *Employers embrace artificial intelligence for HR*, *SHRM*. Available at: https://www.shrm.org/resourcesandtools/hr-topics/global-hr/pages/employers-embrace-artificial-intelligence-for-hr.aspx (Accessed: February 1, 2023).

Dastin, J. (2022) "Amazon scraps secret AI recruiting tool that showed bias against women," in *Ethics of Data and Analytics*. 1st Edition. Boca Raton: Auerbach Publications, pp. 296–299.

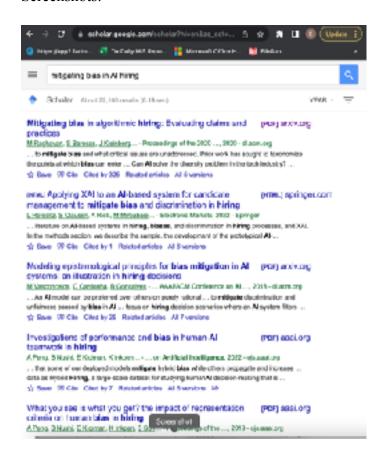
Mehan, J. E. (2022). "Artificial Intelligence - Ethical, Social and Security Impacts for the Present and the Future". United Kingdom: IT Governance Ltd.

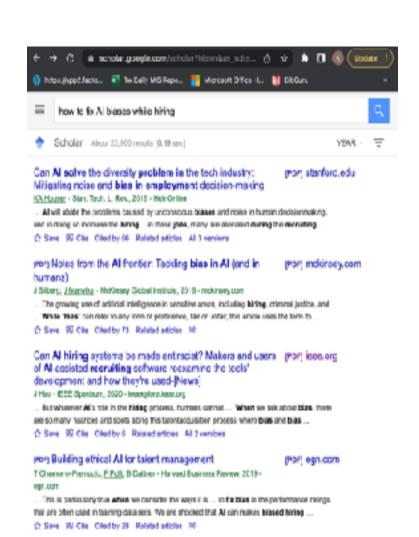
Raghavan, M. *et al.* (2019) "Mitigating bias in algorithmic hiring: Evaluating claims and practices," *arXiv* [cs. CY]. Available at: http://arxiv.org/abs/1906.09208.

Raveendra, P. V., Satish, Y. M. and Singh, P. (2020) "Changing landscape of recruitment industry: A study on the impact of Artificial Intelligence on eliminating hiring bias from recruitment and selection process," *Journal of computational and theoretical nanoscience*, 17(9), pp. 4404–4407. doi: 10.1166/jctn.2020.9086.

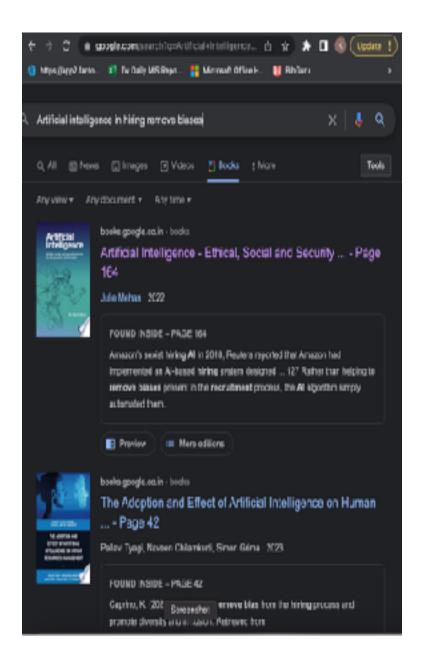
# **Appendices**

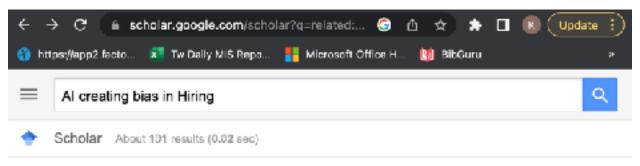
#### Screenshots:





Amazon scrape socret Al recruiti Screenshot howed bias against women I Destin- Ditios of data and analytics, \$110 months principles.





## Amazon scraps secret All recruiting tool that showed bias against women.

J Dastin - Ethics of data and analytics, 2018 - api.taylorfrancis.com

Ethics of Data and Analytics; Concepts and Cases Page 1 296 Chapter 7.1 Amazon Scraps Secret Al Recruiting Tool that Showed Bias against Women\* Jeffrey Dastin \* Dastin, Jeffrey ...

☆ Save 59 Cite Cited by 1150 Related articles All 2 versions.

# PDF) Amazon's sexist hiring algorithm could still be better than [PDF] imd.org

M Lavanchy - The Conversation, 2018 - imd.org

CopyrightS 2006-2018 IMD-International Institute for Management Development. All rights, including copyright, partaining to the content of this website/publication/document are ...

☆ Save 59 Cite Cited by 9 Related articles №

# [αιτκτιον] Amazon scraps secret Al recruiting tool that showed bias against women] Reuters

J Dustin - Hentet fra https://www.reuters.com/article/us-amazon ..., 2018

☆ Save 59 Cite Cited by 5 Related articles

## [PDF] Big data and gender-biased algorithms

[PDF] academia.edu

<u>E Saka</u> - The International Encyclopedia of Gender, Media, and ..., 2020 - academia.edu

Algorithms and big data have recently become household terms and, almost immediately, issues of bias began to surface in the critical literature. Race bias was the first to be named ...

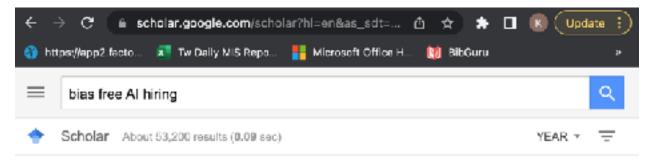
☆ Save 59 Cite Cited by 12 Related articles All 3 versions 89.

# [воок] Women in Tech: Take Your Career to the Next Level with Practical Advice and Inspiring Stories

T Wheeler - 2016 - books.google.com

"Jam packed with insights from women in the field," this is an invaluable career guide for the aspiring or experienced female tech professional (Fd Screenshot of a startup, Tarah ...

☆ Save 59 Cite Cited by 3 Related articles



### [PDF] Will Al remove hiring bias

### [PDF] shrm.org

N Lewis - Strategic HR Review, Retrieved July, 2018 - shrm.org

... intelligence (AI) tools to tackle discrimination in hiring—and ... ering AI solutions caution that a totally bias-free hiring process ... However, she asserts that bias can occur later in the hiring ...

☆ Save 59 Cite Cited by 9 Related articles All 2 versions №

#### Changing Landscape of Recruitment Industry: A Study on the [PDF] researchgate.net Impact of Artificial Intelligence on Eliminating Hiring Bias from Recruitment and Selection Process

PV Raveendra, YM Satish... - Journal of Computational ..., 2020 - Ingentaconnect.com

... processed and analysed through AI to avoid any bias based on age, gender, race etc. It ensures that the suggestions offered by AI is free from any unconscious biases in hiring. • Value ...

☆ Save 59 Cite Cited by 6 Related articles All 3 versions.

#### Bots, bias and big data: artificial intelligence, algorithmic [PDF] uark.edu bias and disparate impact liability in hiring practices.

MK Raub - Ark. L. Rev., 2018 - HeinOnline

... be released unless it has been tested to be bias-free (which we do!)." Whether this ... bias and discriminatory effects. In selecting a hiring assistance service that uses artificial intelligence ...

☆ Save 59 Cite Cited by 116 Related articles All 3 versions.

## [PDF] An overview of ethical issues in using AI systems in hiring with a case study of Amazon's AI based hiring tool.

[PDF] academia.edu

AA Kodiyan - Researchgate Preprint, 2019 - academia.edu

... Another definition of fairness would be free from bias based on gender or ... free from bias or other issues before deployment. • Compromise: Company is to develop system free from bias ...

☆ Save 59 Cite Cited by 23 Related articles All 3 versions 50.

## [PDF] All is the future of hiring, but it's far from immune to bias [PDF] harvard.edu

D Ghosh - Quartz at Work, 2017 - scholar.h: Screenshot

... Algorithmic blas could also show up in ... free of why sort of blas. The likelier scenario, though, is

# Task - 2

Crip technoscience is a field of study that examines the intersection of disability, technology, and science from a critical perspective. It aims to understand the ways in which technology and science have been used to create, reinforce, and challenge ableist norms and to explore the potential for technology to promote disability justice and empower disabled people. This field takes into account the social and cultural factors that influence the development and use of technology and seeks to uncover the biases and power dynamics that shape these processes. A study stated that considering the differences in politics and history in several regions of the world where disabled people are differently positioned, redirect others towards social worth, collective disability and suffering reframe, and justice as a continuous everyday practice (Kim, 2019). Another study mentioned that Crip-technoscience encompasses both historical and modern design techniques, political activity, scholarly collaborations, international systems, and smallscale impedance (Hamraie and Fritsch, 2018). With the emergence of this technoscience, disabled people are becoming more active and interested and the world is focusing on their talent and creativity. Technology in the global context has been enhanced in several ways. Scientists are creating advanced space stations to facilitate more information to the world and make space technology supreme. In this respect, a report stated that space technology is integrating automated technology such as Robotics and AI to assist humans (Easyreader, 2020). Additionally, such technology will also be able to assist physically disabled scientists to do their research on the space stations.

In a space station environment, crip technoscience would consider the ways in which technology is used to support and accommodate the needs of astronauts with disabilities. This could include modifications to equipment and interfaces to make them more accessible, assistive technologies for mobility and communication, and adaptations to the physical environment to enhance accessibility (Niiler, 2021). Crip technoscience would also examine the ways in which the design and deployment of space technologies may impact disabled populations on Earth, such as the consequences of microgravity on the bodies of disabled astronauts, or the implications of space-based technologies for the accessibility of space exploration. Making sure that every person has access to space research and can participate in global collaboration for the sustainable use and exploration of space is essential (UNOOSA, 2022). It would seek to challenge ableist assumptions and promote a more inclusive and equitable vision of space exploration that is accessible to all people, regardless of ability.

The selection of a crew for a space mission is typically based on a variety of factors, including scientific and technical expertise, physical and mental fitness, and teamwork skills. In the case of crip technoscience, it is likely that the crew would also be selected based on their abilities to represent and advocate for the needs and perspectives of disabled individuals (Heinicke, et al.,

2021). The specific criteria used to select a crew would depend on the goals and objectives of the mission and the organization responsible for it. Crip technoscience aims to challenge these barriers and promote greater representation and inclusion of disabled individuals in all aspects of space exploration, including crew selection.

## References

Easyreader, (2020) *10 space technologies of the future*, *Easy Reader News*. Available at: https://easyreadernews.com/10-space-technologies-of-the-future/ (Accessed: February 1, 2023).

Hamraie, A. and Fritsch, K. (2018) *View of crip technoscience manifesto*, *Catalystjournal.org*. Available at: https://catalystjournal.org/index.php/catalyst/article/view/29607/24772 (Accessed: February 1, 2023).

Heinicke, C. et al. (2021) "Disability in space: Aim high," Science (New York, N.Y.), 372(6548), pp. 1271–1272. doi: 10.1126/science.abj7353.

Kim, E. (2019) "Continuing presence of discarded bodies: Occupational harm, necro-activism, and living justice," *Catalyst Feminism Theory Technoscience*, 5(1), pp. 1–29. doi: 10.28968/cftt.v5i1.29616.

Niiler, E. (2021) "Can technology open spaceflight to disabled astronauts?," *Wired*, 2 March. Available at: https://www.wired.com/story/can-technology-open-spaceflight-to-disabled-astronauts/ (Accessed: February 1, 2023).

UNOOSA, (2022) *Space4People with disabilities*, *Unoosa.org*. Available at: https://www.unoosa.org/oosa/en/ourwork/space4personswithdisabilites/index.html (Accessed: February 1, 2023).