

Ap Sem Summer Assignment

Shaurya Singh

September 2, 2021

Contents

1	Lens, Issues, and Articles	1
2	Choose one of the lenses with the best question which you have created. Read a few articles on the topic, and for two articles do the following:	4
2.1	Article 1: The fight against fake-paper factories that churn out sham science	4
2.2	Article 2: A Review of Future and Ethical Perspectives of Robotics and AI	5

1 Lens, Issues, and Articles

- Theme: Technology

Lens	Issue/Question	Article
environmental	How can we use technology to efficiently generate and store energy?	https://energystorage.org/why-energy-storage/technologies/

Continued on next page

Continued from previous page

Lens	Issue/Question	Article
Scientific	How can we use technology to filter out artificial research papers?	https://www.nature.com/articles/d41586-021-00733-5
Economic	How can we use AI to predict demand and reduce cost of goods?	https://hbr.org/2016/11/the-simple-economics-of-machine
Political and Historical	How can we use AI to analyze and predict the results of elections?	https://www.wsj.com/articles/artificial-intelligence-shows-poten
Artistic and Philosophical	How will artificially-generated art affect art prices in the future	https://www.forbes.com/sites/jessedamiani/2020/09/21/in-this-exhibition-an-ai-dreams-up?sh=6c0d29e732e6

Continued on next page

Continued from previous page

Lens	Issue/Question	Article
Cultural and Social	What are the effects of technology on a kids social life?	https://www.linkedin.com/pulse/impacts-technology-culture-traditi
Futuristic	How will technology affect transportation in the future?	https://capgemini-engineering.com/us/en/insight/how-technologies-will-change-the
Ethical	How can we prevent unethical robotics in the future?	https://www.frontiersin.org/articles/10.3389/frobt.2017.00075/full

2 Choose one of the lenses with the best question which you have created. Read a few articles on the topic, and for two articles do the following:

2.1 Article 1: The fight against fake-paper factories that churn out sham science

1. Brief summary of the article

- Since last January, journals have retracted at least 370 papers that have been publicly linked to paper mills. Many more retractions are expected to follow; 15 are still under investigation. Research-integrity sleuths have warned that some scientists buy papers from third-party firms to help their careers. Image detectives who work under pseudonyms posted a list of more than 400 published papers they said probably came from a paper mill in January 2020. By March 2021, they had collectively listed more than 1,300 articles as possibly coming from paper mills. Around 26% of the articles that the sleuths alleged came from paper Mills have so far been retracted or labeled with expressions of concern.

2. Authors Thesis:

- Research-integrity sleuths have repeatedly warned that some scientists buy papers from third-party firms to help their careers

3. To what extent are the authors claims valid?

- The authors claims are valid, as the company publishing this article (Nature), deals with peer-reviewing and publishing research papers like these every day. The claims of the article are not only backed up by the company's experience, but also anecdotes from other publishers and researchers, who have been cited in the article

4. What is one weakness with the author's claim?

- One weakness with the author's claim is that it does not reference information that could be classified as coming from experts in the field. For example, having statements from established peer-reviewers may be beneficial.

5. Copy and paste 2 direct quotes that best represent this article .

- In a statement this year to Nature, Elsevier said that its journal editors detect and prevent the publication of thousands of probable paper-mill submissions each year, although some do get through.
- We are one of a number of publishers to have been affected by such activity.” Since last January, journals have retracted at least 370 papers that have been publicly linked to paper mills, an analysis by Nature has found, and many more retractions are expected to follow.

6. Evaluate the article’s effectiveness. Is it convincing?

- The article is convincing. The write is objective, to the point, and makes sure to back up her writing with sources and citations. The site itself is trustworthy, *nature.com* is a host to many research papers and is experienced on the topic.

7. Do you agree with the author?

- I completely agree with the author. Companies who churn out fake manuscripts are a disgrace to science, and harm the work of other students and researchers who worked hard to produce original work.

8. Create an MLA works cited entry for each article:

- Else, Holly, and Richard Van Noorden. “The Fight against Fake-Paper

Factories That Churn out Sham Science.” *Nature*, vol. 591, no. 7851, Mar. 2021, pp. 516–19. [www.nature.com](https://doi.org/10.1038/d41586-021-00733-5), <https://doi.org/10.1038/d41586-021-00733-5>.

2.2 Article 2: A Review of Future and Ethical Perspectives of Robotics and AI

1. Brief summary of the article

- Authors and movie makers have been actively predicting how the future would look with the appearance of advanced technology. Recently, business leaders and academics have warned that advances in AI may have major consequences for society. Both sides could do well to learn from each other

2. Authors Thesis:

- This article reviews work considering both the future potential of robotics and AI systems, and ethical considerations that need to be taken in order to avoid a dystopian future.
3. To what extent are the authors claims valid?
- The author's claims are very valid. The author is experienced in the subject and researches the subject at a prestigious university. The paper is published under a well known publishing firm with a .org address. The author also cites all his sources, which are from reputable authors and firms
4. What is one weakness with the author's claim?
- One weakness with the author's claim is that it does not reference information that could be classified as coming from experts in the field. For example, the United Nations has several policies and releases several articles that concern the authors chosen subject. Something of a similar nature would be ideal.
5. Copy and paste 2 direct quotes that best represent this article
- The technological transition from industrial robots to service robots represents an evolution into more personalized systems with an increasing degree of autonomy.
 - Ethical considerations should be taken into account by designers of robotic and AI systems, and the autonomous systems themselves must also be aware of ethical implications of their actions.
6. Evaluate the article's effectiveness. Is it convincing?
- The article is convincing. The write is objective, to the point, and makes sure to back up her writing with sources and citations. The site itself is trustworthy experienced on the topic.
7. Do you agree with the author?
- I agree with the authors claim. The author takes into account several ethical implications that prove the claim to be correct. Additionally, the author's mention of transition from industrial to service robots connects directly to the field of study. This helps support the claim made earlier.
8. Create an MLA works cited entry for each article

- Torresen, Jim. "A Review of Future and Ethical Perspectives of Robotics and AI." *Frontiers in Robotics and AI*, vol. 4, 2018, p. 75. Frontiers, <https://doi.org/10.3389/frobt.2017.00075>.