

## Experience using AI to write papers

During my years as an English instructor, I had my fair share of last-minute essays. It's one of those things you grow to expect. Like the student whose grandma died four times in one year's time. You can always tell which were last minute by their tell-tale signs, some of which included a female name being left on a male paper, using a font size that's too large, or, my personal favorite, hiding extra spaces and praying the professor would not catch on. The same goes for plagiarism, e.g., phrases that struck you as familiar or blatant quotes without sources. Students always thought the teacher would never know if they let a website write their paper the night before it was due.

While teachers are used to it, it seems the problem is growing and spreading into other niches of our world. Over time these artificial intelligence agents have improved vastly, but still seem to be missing a huge component, in my opinion: ethically crediting sources. \*It is important to note that the Bing version of ChatGPT does include citations.

With this in mind, the emerging technology team was discussing the use of AIs to expand our content. Most of us have seen iRobot, and others, so we know what to expect if you give too much power to artificial intelligence so we decided to run an experiment and see how well we could collaborate with these AIs (kind of like keeping your friends close, and enemies closer).

## Overview

With all the talk about Natural Language Processors (NLPs) out there, the Emerging Tech team felt that it was important to test out leveraging this tool and others like it. We discussed various ways to attempt this experiment, including giving the AIs the same topic to write about and comparing their s, but this left us with a hole in our theory. We wouldn't be able to compare the use of AI to that of a human on our team. Due to this, we decided to give a topic to the AIs that I had already written about. My latest article was on Top and Emerging Development Languages. This paper details my experience working with various AIs to generate articles, their findings, and our conclusion.

## Working with Various AIs for Generating Content

I wanted to have a good variety of AIs for generating content. Some of the AIs are focused on writing papers, ideally focused on students as users, while others focus more on content, SEO, or research.

## Which AIs did we use and Why

For this experiment we used the following:

- [ChatGPT](#)- ChatGPT is a trained model that interacts in a conversational manner using dialogue format to answer follow-up questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests.
- [HyperWrite](#)- HyperWrite uses AI to write blogs, twitter threads, product descriptions, and more by suggesting words, phrases, and even full sentences.
- [AI-Writer](#)- AI-Writer is a content generation platform that uses AI writing models to generate articles from just a headline or topic.

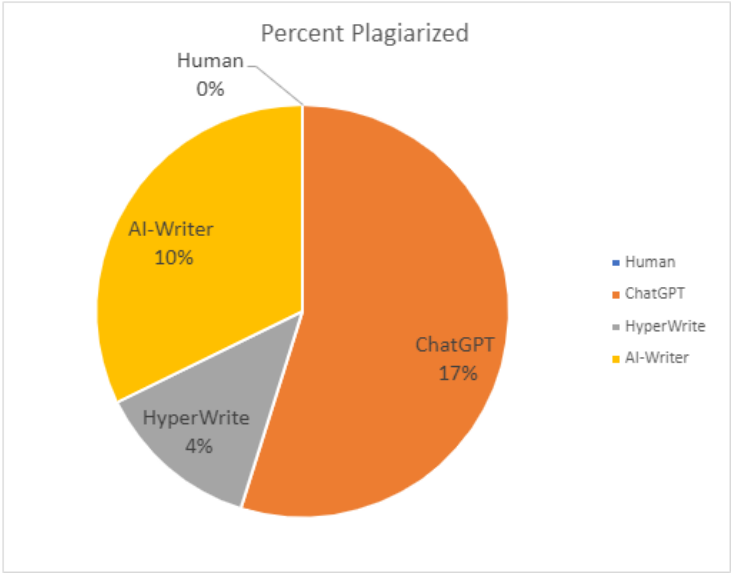
**Commented [C(1)]:** Just FYI - the Bing version of ChatGPT has built in citations. I think I saw that on a news story somewhere.

<https://www.pcworld.com/article/1504752/theres-a-war-brewing-over-ai-citations-and-youre-going-to-lose.html>

**Commented [J(2R1)]:** Great catch! I should def add a note for that!

### Our Findings

We created a test case using the Top and Emerging Development languages to compare my paper to the AI-generated research paper. The two papers are below for review. We specifically want to know if the content is worth the effort of finding the AI’s sources. We want to know if this is worthwhile for Emerging Tech to use in some future papers. I have attached the breakdown of the Grammarly and Plagiarism reports.



I used multiple AI paper generators, but the one that performed the best for this task was HyperWrite. Please let me know if there are others you found to be better, and I can add that to the comparison below.

AI Used	Percent Plagiarized	Word Count	Sources used performance	Performance Score (Grammarly)	Vocabulary (Graded by Grammarly)	Doc Links
N/A, (Human)	0%	1,683	15	100	Above Average	<a href="#">Top Emerging Tech Languages by Jennifer DOC</a>
<a href="#">ChatGPT</a>	17%	564	9	80%	Above Average	<a href="#">ChatGPT generated Top Dev Languages Doc</a>
<a href="#">HyperWrite</a>	4%	894	0	81	Below Average	<a href="#">Top Emerging Tech Language AI-Generated DOC</a>
<a href="#">AI-Writer</a>	10%	519	10	86	Below Average	<a href="#">2nd AI Generated Emerging Dev Languages Article</a>

## Benefits and Drawbacks of AI Generated Content

### Pros

- **Saves Time**- It could take weeks or months for a human generated thorough research article, while AIs could complete it in minutes.
- **Fast Results**- In the world of emerging technology it is important to deliver the content while it is still highly relevant. Sometimes humans can be backed up with other work, and articles may not be published with the best timing, compared to their robot counterparts.
- **Search Engine Optimized**- Content that is optimized for search engines directs traffic to websites. Often finding writings with SEO skills is hit or miss. This is something that most AI writers have built in.
- **Cost Effective**- Most of the NLPs are free to use at the moment.

### Cons

- **Plagiarism**- It wasn't a surprise to see the heavily plagiarized content these robots produced. Ethically it is important to always give credit when it is due. With that said, there are numerous websites that would find the sources within the article after the AI generates it.
- **Limited Knowledge**- ChatGPT warns users that its model was trained on information until July 2021. This means content that came up after that date would not be included in its research. Other NLPs are the same. If you were searching for emerging technologies, it would refer to things from two years ago as if they were about to hit the market.
- **Often unreliable**- There are numerous times when I was trying to access the AI writers and their sites would be down due to updates, bugs, or heavy traffic. This was frustrating as it could impact deadlines.
- **Inaccurate**- One of the biggest flaws I found was that the content produced would be utterly inaccurate. When discussing various types of development languages, it compared them almost identically. This would be similar to someone describing an apple the same way they describe a tomato. While the two are fruits and typically found in the same area of the grocery store, they are vastly different in taste, look, smell, and recipes.
- **Biased**- The NLPs are only as good as the material they are trained on. If the AIs were solely trained on content relating to Alaska, they would have biased results.
- **Time-consuming**- Another important fact that we found was that when looking over the AI-generated content, we had to spend a great deal of time checking to make sure it was accurate and finding its sources. While it could save time in the writing process, it could cause larger bottlenecks later in the editing process.

## Conclusion

We discussed as a group the benefits and drawbacks of using AI to write articles. The team reviewed these articles compared to the article I wrote on the same topic. At this time, it is worth tracking and experimenting with AI content-writing software. Given the current state of affairs with a lack of traceability to source documents and the informal use of the tools (without warranty or support) indicates that these tools are not quite ready for business purposes and should be used only in an assistive way by the writer.

Commented [EM3]: Isn't this referring to this paper?

# References

Papers to compare:

AI Used	Doc Links
Human	<a href="#">Top Emerging Tech Languages by Jennifer DOC</a>
<a href="#">ChatGPT</a>	<a href="#">ChatGPT generated Top Dev Languages Doc</a>
<a href="#">HyperWrite</a>	<a href="#">Top Emerging Tech Language AI-Generated DOC</a>
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Links to AIs
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<a href="#">HyperWrite</a>
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