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ENC1102

Oct 15 2022

Research Proposal

Question: What is the impact of NLP on creative careers?

**The Statement of Purpose:** 

NLP (Natural Language Processing) is a subfield of AI (artificial intelligence) that's currently making huge advancements and is becoming a more commonly used tool in many industries. It's a very powerful tool that can impressively understand language like a human would. Using that understanding, it can do many crazy things such as produce text like a marketing writer would, or produce images based on text prompts. This is amazing, but at the same time scary for people whose jobs it is to do these things. There's already been talk about this concern and what risks it will pose to people in creative careers. As a computer science major and someone very passionate about programming, I have a very personal connection with the topic. In the future, I'd also like to specialize in AI so studying this topic a bit deeper now is very interesting to me. The overall question I'm trying to answer is, "What is the impact of NLP on creative careers?". Under that are many smaller questions I'd like to uncover the answer to, such as, "will AI generated art be recognized as real art and the developers using the AI be recognized as artists?" and "will AI text generation services such as copy.ai take over marketing jobs?"

Background/Justification:

There's been some emergence of concerns that NLP poises with how it's infiltrating some industries. Recently for example, just barely a month ago, an art piece generated by an image AI won a fine arts competition, which stirred up lots of controversy. People were saying how the person who controlled the AI to create this art isn't a real artist and the fact that AI like this could take away jobs from real artists is scary (Teoh). This is a very real concern that begs the discussion whether this should be okay, because it puts artists' jobs at risk. This is also a dilemma that's never been presented to our society, so now we have to decide together how we approach this and what the norm will be on this from now on. This is the answer I will try my best to help achieve.

## Research Plan:

For my research, I plan on interviewing people I personally know in the field of computer science, who may also have some specific experience in AI. I would also like to interview people in the fields that AI is endangering, to see if they feel like AI creating their work is acceptable, or if they may be a bit worried about being replaced by these AI. For the interviewees in computer science, I could find them myself because this is my field, so I personally know viable candidates. More importantly, their information needs to be credible, and that's not something I can guarantee of random people I select. On the other hand, for selecting people to interview in the creative field, they don't need to be particularly skilled as I am more concerned with their personal opinion on this matter as it directly affects them. So for selecting those candidates, I may post a form online asking if people in creative/marketing careers would like to be interviewed on this topic, and I can select candidates from the pool of people who are interested. Another important method I will use for gathering my information is simply observation. The impacts of NLP that I'm trying to research are happening around us as we speak, so simply

observing how the use of NLP pans out will provide me with exactly what I need. A major example is the art show mentioned above, that was won by art piece done by an AI (Teoh). To summarize, I feel like observing and interviewing people in the field are the best methods for my research because this is a current phenomenon that is unfolding around us.

## **Draft of Research Materials:**

For necessary materials, the most important thing I will need is simply the technology around me. I'll use my phone and laptop to gather candidates—maybe through surveys/forms—and then use those same devices to contact them to schedule interviews, then use those devices to take notes on our interviews and all the information I collect. I will also use technology for my observations and monitoring developments in NLP or any incidents that could be of use to me. Some of the things I will be observing would be looking out for major events involving AI/NLP, such as AI winning art competitions or people getting fired in favor of using AI tools.

Some possible interview questions:

"Do you think tools like copy.ai could replace humans in marketing jobs?"

"Do you think AI created art, such as from Dall-E, should be recognized as real art?"

"Should people who create art with AI be considered artists, and recognized for their art?"

"Do you think AI will likely replace creative careers? Or mostly help people in these careers and be a useful tool for their work?"

## Works Cited

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Darling, Dr Kate. "AI Image Generators Will Help Artists, Not Replace Them." *BBC Science Focus Magazine*, BBC Science Focus Magazine, 3 Oct. 2022,

<a href="https://www.sciencefocus.com/news/ai-image-generators-will-help-artists-not-replace-them/">https://www.sciencefocus.com/news/ai-image-generators-will-help-artists-not-replace-them/</a>.

## Working Bibliography (additions to works cited):

Teoh, Belinda. "Art Made by AI Wins Fine Arts Competition." *Impakter*, 13 Sept. 2022, https://impakter.com/art-made-by-ai-wins-fine-arts-competition/#:~:text=An%20artwork %20made%20by%20Artificial,used%20to%20compete%20in%20competitions.

This source would be a perfect addition to my research project, as it's an example of where AI is getting rewarded for work normally done by humans. I can use this for lots of important direct quotations of how it's making people feel, giving me real impacts of NLP on creative careers.

Darling, Dr Kate. "AI Image Generators Will Help Artists, Not Replace Them." *BBC Science Focus Magazine*, BBC Science Focus Magazine, 3 Oct. 2022,

<a href="https://www.sciencefocus.com/news/ai-image-generators-will-help-artists-not-replace-themm/">https://www.sciencefocus.com/news/ai-image-generators-will-help-artists-not-replace-themm/</a>.

This source is a great addition because it recognizes how AI can create art, yet it explains how it will improve and be an asset to creative careers, not destroy them.