#### VERSION ONE:

### Carolyn He

# Why AI?

AI and I have always had a long, complicated relationship. Since middle school, I have taken no shortage of coding classes. From Introduction to Programming to AP Computer Science Principles, as long as it involved computers, I took it. My favorite units were always applications of computer programming to current, commonplace issues. For instance, "big data" allowed me to visualize global warming on an illuminating scale. As a supplement project, I designed a python program in class that measured an individual's contribution to global warming based on mundane habits. For weeks, I labored meticulously over the expansive, never-ending neon lines of code...

Only to realize AI could breezily and more sophisticatedly accomplish the same in a fraction of a second. Instead of feeling slighted or bitter, I became fascinated with the idea of utilizing AI—with its infallibility, dexterity, and versatility—to solve humanity's contemporary, most urgent issues.

Afterall, artificial intelligence is changing the way the world works. Artificial intelligence and big data have risen to the top of priorities for small businesses and major corporations alike. CompTIA reports that, "91.5% of leading businesses invest in AI on an ongoing basis", a worthy investment considering that "AI market share in the US is expected to value \$190.61 billion by 2025" (Watters). There, however, remain ethical concerns over the AI revolution, such as the persistent issue of bias within ML models and the fear that AI will come to replace humans in their professions. Despite the negative perceptions, "Jobs are anticipated to be in high demand with 97 million specialists needed in the AI industry by 2025" (Watters). Considering my future career aspirations in data science--a field notable for its prevalent usage of AI--I knew that I simply wanted a hand in this industry of the future.

Through Inspirit AI's Scholars Program, I not only developed a more advanced, nuanced understanding of AI, but also AI's extraordinary ramifications for humanity's future. The best part? The Inspirit AI program was as simple as a walk in the park (of the future!).

## A Candid Review of Inspirit AI

To be entirely frank, coming up with an engaging hook for this blog post was more difficult than the entirety of my Inspirit AI experience. I say this with full compliments to the Inspirit AI Program--simplicity and accessibility are precisely what makes this program so successful. For context, I participated in their summer program as well as the AI Ambassador Program that following October. The original Inspirit AI program, which took place for me in the month of August, occurred over 2 weeks, with approximately 2 hours of engagement allotted per day. Though the program required student availability during the prime hours of the day (3 - 5 p.m. for me), I overall found the program to be worthy of the time commitment! First, I commend the Inspirit AI program for its small student-to-teacher ratio. Though there must have been at least 200 students enrolled, Inspirit AI supplied a plethora of instructors as well; we conducted the majority of each session in cohorts of roughly 8-10 students. The first hour would normally consist of a lecture delivered by one of our mentors, and through these lectures, we learned a diverse array of topics surrounding artificial intelligence--from common machine learning models to the ethics surrounding the use of AI. The lectures given were always incredibly enlightening, imparting much knowledge to me. After a brief break, the second half of the program featured an hour of hands-on programming through Google Collaboratory!

Prior to Inspirit AI, I was familiar with coding in Scratch, Snap!, and Javascript; Inspirit AI allowed me to add Python to my repertoire of languages as well. The majority of the coding was fairly straightforward, and with the help of my mentor, I grasped the concepts quickly. It definitely helped that the curriculum appealed to a broad array of student interests--art, literature, healthcare, law, etc. We were encouraged to delve into a specific intersection of AI for our final project, and I chose to conduct a project on Skin Cancer Detection.

Overall, the original Inspirit AI program is definitely worth trying out, as it caters to individuals of all interests and backgrounds, regardless of their familiarity with AI or programming! The curriculum delivered a great introduction to AI in an easy to parse, understandable, and accommodating format. In a supportive environment of peers and qualified mentors, I was allowed to further my passion in AI, eventually leading to my own AI project...

## The Implications of AI in Academia

My AI project is a critical component to a statistical study I am currently conducting at my school as part of an independent research program. Through my independent study, entitled "A Sustainable Future", I am analyzing my school's paper consumption and utilizing an AI model to predict and draft an appropriate consumption plan for my school. My research consists of collecting data on how much paper my school uses based on factors such as subject, course type, grade, student preferences, teacher preferences, etc. From there, I will analyze any correlations each individual variable presents to paper consumption and try to model a mathematical function after such.

This is where the power of AI comes in: I plan to design an AI model that allows schools to tailor a paper consumption to their students using the aforementioned factors. While coming up with an ideal paper consumption plan is no small feat, what is even more exciting to me is the prospect of promoting my work and making it accessible to students across the globe! Through

sharing A Sustainable Future with others, I hope it will resonate with students and ignite in them a passion to initiate change in their own schools. If educators come across A Sustainable Future, hopefully it can serve as a poignant moment of contemplation as well.

During the AI Ambassadors program, I was encouraged to create a presentation detailing my progress with A Sustainable Future. Although I was never able to present, I will be including a brief overview of my presentation below for those interested:

In my presentation, I will explicitly be going over how AI is typically being used in the educational setting today and what ramifications AI poses for academia's future. Namely, I will be addressing several concerns in energy efficiency, resource expenditures, and other issues of that nature. I will also be offering AI solutions for these problems, in hopes of accurately conveying the critical and astonishing potential AI poses for schools. By the end of my presentation, listeners should have a firmer understanding of the presence of AI in academia, and more importantly, how they can contribute!

Of course, the most change is accomplished by many. If you're interested in participating in this environmental endeavor, please fill out the following google form: <u>https://forms.gle/hc7jdAQjtWiqo7RRA.</u>

Only through my relationship with AI was "A Sustainable Future" born. In the coming months and years, I hope every student will be able to develop their own lasting relationship with Artificial Intelligence. After all, Artificial Intelligence is the field of the future, and we, the rising generation, will be those walking on it.

## **Resources:**

30+ Artificial Intelligence Statistics & Facts for 2022, written by Ashley Watters: <u>https://connect.comptia.org/blog/artificial-intelligence-statistics-facts</u>

The Implications of Artificial Intelligence in Academia Presentation: https://www.canva.com/design/DAFP4opUSWY/dsZIZOl2kp6q\_eH2VGZmHg/view?utm\_conte nt=DAFP4opUSWY&utm\_campaign=designshare&utm\_medium=link&utm\_source=publishsha relink

A Sustainable Future Website: https://che2547.wixsite.com/website-1

A Sustainable Future Project Page: <u>https://rootsandshoots.org/projects/a-sustainable-future/</u>

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## WHY AI?

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