**The Stanford community is deeply curious and driven to learn in and out of the classroom. Reflect on an idea or experience that makes you genuinely excited about learning. (100 to 250 words)**

* Harvard cs 50
* Dynamic programming hard concept - had to overcome
* String distance
* Relating it to other areas -> dna
* Final project - mixing what i had learnt from science olympiads (algebraic method) and what i had learnt about computer science

# Rev. 1

In the summer of 2018, after I came back from the International Science Olympiad in the Netherlands, I had some spare time before I went to Israel for a cultural school trip. That year, I was planning on participating in the Informatic Olympiads, so I wanted to prepare by learning more about algorithms and computer science. I looked up introductory CS courses from universities, remembering I loved a CIS 194 from Penn, found CS 50 from Harvard.

In the beginning, everything went fairly smoothly until I got stuck with a Dynamic Programming problem. It had to do with calculating the difference between two different texts in a very fast way, but that’s not what’s important. What is, is that while I was rewatching the lesson to figure out if I had missed something, I took notice of how this algorithm, or steps, could be used to understand the differences between the DNA sequence of two individuals. My mind was blown wide open, I had never thought of mixing knowledge from two completely different areas.

This was such a new concept for me, one that I ended up loving and that interested me in many topics outside computer science. So for my final assignment, I combined what I had learned in the Science Olympiads and with what I had learnt in the course, and decided to create a program that helped my friends and me with schoolwork by automatically balancing chemical equations.

# Rev. 2

Ever since I entered highschool, I have loved competitions. The best part was what I learned preparing for them. The most common way highschool competitions take place in Argentina is in the form of “olympiads”. The two most impactful I’ve participated in are the ones on Science and in Informatics. Individually, they taught me a lot, but combined, they had a much stronger impact. Mixing them taught me something I couldn’t have learned from any single olympiad.

To give some context for the story I’m about to tell, it was summer and I had just come back from the International Science Olympiad. I was looking for a way to prepare for the Informatics Olympiad, as it was the first year I was going to participate, and found a few algorithm lectures.

I practically binge watched them, until I got stuck on a specific one. To get out of the rut, I started watching several videos on that same topic. One of them caught my attention. They mentioned that that algorithm was used in some biology study. It blew my mind that mind that such complex disciplines were being mixed.

Quickly after that, I built one of my most useful programs until now. A chemical equation balancer that use all my knowledge from the Science and from the Informatics olympiad. Since that day, I take every opportunity I get to learn about diverse topics I’m interested in and then, when applicable, try to connect them in some way to computer science.

# Rev. 3

Since I love competition, ever since I entered highschool, I’ve been competing in several olympiads. My favourite ones are the Informatics and Science ones.

It was summer and I had just come back from the International Science Olympiad. I was looking for a way to prepare for the Informatics Olympiad, as it was the first year I was going to participate, and found a few algorithm lectures.

I practically binge watched them, until I got stuck on a specific one that was used to find the difference between two texts. To get out of the rut, I started researching it, trying to understand how it worked. A paper on the use of this algorithm for a biology study caught my eye. It blew my mind that an algorithm created to compare texts was being used to analyze the difference between the genetic sequence of two different species.

I decided I wanted to do something like that, so with the algorithms I had learned from the lectures, I built a program that tackled what I had the most trouble with in the Science Olympiads, balancing chemical equations. I shared it with my friends, and found it tremendously useful. Since that day, I take every opportunity to learn about diverse topics I’m interested in, and try to connect them with my passion, computer science.

For example, I’m now researching how the stock market works, so that I can build a stock trading program that works by itself.

# Rev. 4 (T y G)

While preparing for the Informatic Olympiads in my junior year of highschool I discovered an algorithm lecture series online. I binge watched them until I got stuck on an algorithm designed to uncover differences between texts. In trying to figure it out I came across an article on its application to analyzing DNA sequences of individuals from different species. I was fascinated by the application of this method across disciplines and challenged myself to do the same with the algorithms I was learning. That evening I had an epiphany; one of the topics that I was struggling most with was balancing complicated chemical equations. I wrote a program that applied classic computer science to the balancing problem. I started using it in class and my friends found it very useful. Since that day, I step back at every opportunity and ask myself how what I am studying connects to what I know about computer science and how potential connections may change my understanding of the problem. For example, I’m now learning about how the stock market works and I am intrigued by the idea of building an autonomous stock trading program.