

My interest in engineering began as a child when I spent my summer creating robots and coding their systems during summer school. This experience remains one of my happiest memories. Around the same period, by understanding how aircraft work, I overcame my fear of flying and developed a deep passion for aviation. I explored its complex mechanisms from the flight computer to the engine systems through simulators like Microsoft Flight Simulator or Xplane. It was the first time I understood the power of engineering, which transformed my fear into fascination. These experiences fuelled a natural curiosity that has only grown over the years.

Two books that particularly inspire me to do engineering are "*Skunk Works: A Personal Memoir of My Years of Lockheed*" by Ben Rich and Leo Janos and "*How to Build a Car: The Autobiography of the World's Greatest Formula 1 Designer*" by Adrian Newey. These stories, like the one of Adrian Newey sketching the iconic Red Bull RB6 or Ben Rich, who led the development of the F-117 Nighthawk, resonate with me as they show that engineering is about turning ideas into reality, and that's exactly what I want to do. They make me want to pursue engineering as a way to bring my ideas to life and have a positive impact on the world.

I've always loved bringing projects from conception to reality. Two years ago, I found an old mechanical watch, which I took apart and reassembled. This experience led to my passion for watchmaking. Inspired, I went on to design a completely original watch from scratch. What began as a hobby evolved into a business, covering everything from creating a website and sourcing parts to assembling watches and promoting the models. Nothing would make me happier than combining my interest in science with the pride of developing and carrying out tangible projects.

Naturally, my favorite subject at school is Physics High Level. I love that my teacher often brings information that goes beyond the program, we have exciting discussions often in areas of engineering, which makes me even more eager to join the engineering course. I loved the part about mechanics in my curriculum as it explains how things work, particularly rigid body mechanics. I also attend Saturday morning classes at the ULB to improve my math skills, where engineering students guide us through advanced topics. One of the most memorable lessons was using trigonometry to derive the value of pi, which made me love maths as I understood that math is more than a subject at school but a whole world.

One of my best memories of my academic career so far is my personal project. I coded an app that is an interactive encyclopedia about marine wildlife in the country the user is in and a website as a landing page for my application. I coded my application in Swift and SwiftUI, which taught me how geolocation and APIs work. I coded the website in HTML, CSS, and Javascript for the most part, which was my introduction to coding and self-learning. I still code several projects in my spare time, which improves my coding skills and helps me learn to manage my time and problem-solving skills, which I know are essential for studying engineering. Additionally, I served for one year as a scout leader in Brussels, organizing activities for 200 children and managing a team of guides of my age. This experience taught me leadership and project management skills, and I'm excited to apply them to group projects in my engineering studies.

As a student at an international school, I thrive in diverse environments and love meeting people from all over the world. I look forward to collaborating with peers from different backgrounds at the university, especially during group projects, where I can bring my leadership skills and

passion for engineering. I am excited to start my engineering career and bring my leadership skills to university, where I can transform ideas into real-world innovations.