

Structure, constraints and trade-offs as the methodological underpinnings of the "engineering mind-set" (G. Madhavan) couldn't be more acutely illustrated than by the sudden emergence of a global pandemic followed by a brutal war raging in our neighbouring country. Both historic events required a novel response under tremendous time-constraints and painful trade-offs. The development and access to cutting edge technology is once again a question of life and death. Merely establishing the vast opportunities (and threats!) this singular moment provides for scientific inquiry is already a thrilling ambition.

From early childhood I have strived to step up to the challenge. I attended Hungary's top-ranked schools. I won the first prize at Bolyai, Hungary's renowned national maths team competition, which put me firmly on the path of STEM. By learning from the best teachers of the country, I have now achieved one of the strongest Matura exams in Hungary.

Pursuing further academic interests, I applied to Milestone Institute, a centre of advanced studies offering personal tutoring and elevated coursework. I have been focusing on advanced maths-based physics, including electromagnetics and mechanics.

I started writing Python scripts in primary school. Later I was admitted to a special course called Techtabor, where I quickly improved my programming skills while building my first mobile application. I also gained experience in managing a project within a given timeframe. From this sprung an opportunity to intern at a software company where I was part of a team that built a real estate listings app that has since been sold to Hungary's largest bank. Soon enough, my friend and I formed a team and began working together on several other projects: an app for us and our classmates that helped us study for tests and our matura exams by quizzing us on relevant questions; or an app that solved most of the constant organisational problems for the school's all-day football cup. The application helped to keep score, alerted the teams that had upcoming games and kept track of all ongoing side-events. Consequently, we were approached by a start-up firm that retained us to build their online project. We had to create a platform to handle esports tournaments and their prize-structures. This was my first real taste in work-for-hire programming with hard deadlines and people who were counting on us.

I also attended a 3D design and printing course, where I learnt about 3D printing and the steps to effectively model and build a product. Designing a merchandise product for Hungary's leading handball team, I also got to appreciate the challenges of constantly changing customer expectations.

Throughout my primary and secondary education, I had spent three semesters in three different state-schools in London. These experiences helped me embrace the core values of diversity, inclusion and fairness. It is of utmost importance that the glittering tech my generation is to develop is always driven and sometimes even constrained by such value considerations. This insight has only gained urgency during my current internship at the Alliance for Liberals and Democrats for Europe (ALDE) and the European Parliament assisting the policy research on digital technology's societal consequences. Excelling at the Matura exams, along with my prior software-design experience opened further astonishing opportunities for a unique gap-year. I got invited to work at several engineering companies, all matching my various extracurricular interests. Out of these I chose a company that develops military-grade diving tech (Open Safety Equipment Ltd). As such, I am planning to spend a substantial part of the 2022/23 AY in Brussels and Edinburgh.

I also play bridge competitively and was part of the national team in the European championships in 2019. I also listen to opera, play football and on lucky escapes, I scuba dive and sail the sea.