

It is impossible to comprehend the whole world, yet crucial to understand some of its structure and mechanics through models. For instance, I have been creating board games since my childhood, aiming to model various decision-making situations. This world of optimizing the outcome of a game led me to the field of algorithms and later to computer science.

At my CS-specialized primary school, I understood loops, functions, recursions, and other fundamentals using Imagine Logo. This prepared and motivated me to attend the special maths class of the best high school in Hungary. My inspiring teacher's lessons, and her weekly exercises and the monthly maths competition of Komal had me think about maths nearly all the time. With one of my classmates, we studied C++ and methods like the Hungarian algorithm. Additional readings on deciphering algorithms and cyber terrorism, such as Mark Russinovich's 'Trojan Horse', which exhibits the crazy world of phishing, confirmed my interest in computer science.

Competitions and preparing for them, play a strong role in my life. In programming, I won the main national competition for 10th graders, Nemes (2017) and placed 6th at Logo (2018), and 9th at OKTV (National Olympiad, 2018), where I competed against students who were a year older. I was invited to the CEOI (Central European Olympiad in Informatics) national qualification and finished 7th (2018). At international contests, I got a bronze medal at Innopolis Olympiad (2018) and Olympiad of Metropolises (2017, individual and team). For a Skyscanner extension, my team won a special award at HackBudapest (2017), a 24-hour coding challenge. In maths, I won nationwide contests, such as Zrínyi (2014) and Bolyai (2014), the primary team competition. I regularly finished in the top 10 at the major national maths competitions of my age category: 7th at Varga (2016), 8th at Kalmár (2015), 3rd at Arany (2017), where I was the only one solving the problem of finding the cardinality of the union of all 2017-element sets, where if x is an element, then so is x^2-x . Also, I gained a bronze medal at the International Olympiad in Linguistics (2018).

My interdisciplinary interest led me to pursue projects. Currently, I'm working on a network study research with János Kertész (Head of CEU Network Science Department). We intend to find a link prediction algorithm on networks where edges may appear between significantly different nodes. I use Python with the Networkx library. This summer, with my classmate and mentors from the company, I created the hiring system of Lynx Analytics (pathfinder.lynxanalytics.com), where I learned how to find a balance between being self-sufficient and cooperative with peers. Last summer I had a two-week internship at Sonrisa, where I worked 6 hours a day on an in-house project that fosters coding dojos for employees. I was also involved in a cancer research bioinformatics project focused on finding genes which can

predict potential metastasis of tumors. Last year I attended a year-long tech camp with monthly sessions. In a group of talented students with proficient mentors, we built a web app to help musicians find a band. We used Javascript (including NodeJS), SQLite and Git(hub). Several weekends a year, and for one week in the summer I attend a maths camp mainly led by Lajos Pósa, where the most talented maths students of Hungary are invited in each age group. We solve intriguing problems, like proving equation unsolvability by infinite descent. We get hints if we get stuck, but the aim is to find our own creative solutions. After school, I attend IOI preparation classes biweekly, and regularly take part in Codeforces contests (codeforces.com/profile/andor0). Beside studying, I play the drums in a band, jazz piano, futsal, and compete in table tennis. I am planning to study in the UK mainly due to the illustrious education system, but the versatile student community and the interdisciplinary opportunities attract me as well.