

Personal Statement

My interest in Mathematics started in my early childhood: I saw Mathematics in every part of life. I always admired the knowledge of those who understand it and use it on a daily basis, and I wished to master it just like them. My father works as an engineer, so when I inquired about Mathematics, he was always happy to answer me and tell me some engaging facts.

At the age of 11, I was admitted to Bányai Júlia Secondary School of Kecskemét, the best school in my hometown, where I met my Mathematics teacher, József Varga, who instantly became my mentor and who I have had one-to-one lessons with for about 7-8 hours a week. I acquired most of my current knowledge about Mathematics from him. Furthermore, I took numerous extracurricular lessons with other teachers in Kecskemét.

For the last 3 years, I have been attending Sándor Dobos' classes in Fazekas Mihály Secondary School to prepare for the IMO, the MEMO, and the Romanian Master of Mathematics competitions. Here, I could develop my skills in explaining solutions in front of an audience. Last year, I also had the opportunity to learn about finite fields and set theory from László Surányi in the so-called Super Study Group of the same school.

Each year since I was 11 years old, I have been invited to the mathematical camps held by Lajos Pósa, where I encountered thought-provoking combinatorial and game-theory problems, and I could ameliorate my skills in working in a team. Last year, I attended the English-Hungarian IMO winter camp where I had the chance to meet people from the English IMO team and get to know them. This year, I attended the Hungarian IMO-MEMO camp, too. The last two years, I was invited to the Maths Beyond Limits camp (MBL), which took place in Miłówka, Poland. During the two weeks I spent there, I could further improve my teamwork skills alongside foreign students who learn Mathematics in a different way from the usual method used in Hungary. I have also been attending the Paul Erdős Mathematical Talent School camps, 5 of them every year for 3 years. Each year, I was placed in a class with people who were at least 1 year older than me.

However, I not only attended mathematical camps, but I have also participated as a camp leader; for example, in a Hungarian EGMO camp last year and some of Lajos Pósa's camps this year, and I also participated as a guide in EGMO 2022. Moreover, I have been teaching Mathematics to younger students for 3 years.

In my free time, I try to get some insight into famous unsolved problems, I read about

partial results, and try to understand the statements a bit more. I recently read a book about Fermat's last theorem and how proving it was beneficial for the world in various areas of life. A few years ago, I also spent some time thinking about Goldbach's conjecture and trying to understand what consequences it has.

During my studies so far, I enjoyed participating in competitions. To be honest, I find it entertaining and challenging to compete with others by solving mathematical problems. I participated in every competition I could, individual and team competitions as well. I won my first gold medal at the age of 8 and I have won over 25 more since then. Below I list a few of my most significant competition results:

- Middle European Mathematical Olympiad (MEMO): individual absolute 2nd place, gold medal, being one of the two students who could solve all problems, team competition 2nd place, silver medal

- Selection competition for IMO and MEMO: 12th place (therefore I qualified to MEMO and RMM)

- National Olympiad (OKTV) 2021: 11th place, 2022: 1st place

- KöMaL 2021: "B" (hard mathematical problems) 6th place, "A" (harder mathematical problems) 5th place

- Romanian Master of Mathematics 2021: 57th place, bronze medal