

## **Personal Statement**

### **2015, Mathematics, Trinity College**

Logical thinking and solving logical problems has been one of my favourite activities since early primary school. From this basis, the world of mathematics has gradually opened up its secrets and I have been delighted to plunge into deeper and deeper concepts of its beauty. I acquired the necessary skills to do this through problem solving.

For the last five years, I have been participating in a Hungarian summer camp for students talented in mathematics and throughout the year I had the opportunity to participate in the talent camps organized by Lajos Posa. Throughout my high school years I have been solving the problems of the Mathematical and Physical Journal for Secondary Schools (KoMaL) ranking in the top 5 in mathematics every year. I visited the biweekly IMO training sessions in Budapest for the last two years and took part in the Hungarian olympiad training camps, both in the summer and in winter, the latter one together with the British team. This enabled me to become a member of the Hungarian team for the Middle European Mathematical Olympiad (MEMO) in 2013, where I received one of three gold medals as well as a silver medal in the team competition. In 2014, I was a member of the team representing Hungary at the International Mathematical Olympiad in Cape Town, South Africa, where I received a silver medal (with 27 points). I have thoroughly enjoyed the friendly but nevertheless competing international atmosphere and meeting the most talented students from 101 countries from all around the world. During 11<sup>th</sup> grade - apart from the IMO - I have participated in both the Hungarian National Olympiad in Mathematics (OKTV) becoming absolute 1<sup>st</sup> place and the Hungarian National Olympiad in Physics where I became 3<sup>rd</sup>. I am looking forward to my last year in high school with good chances of being able to not only participate in next years IMO in Thailand, but fulfilling my dreams by earning a gold medal.

I have lived in Switzerland for nine years (2002- 2011), which helped me to get to know, understand and appreciate people with different cultures and became fluent in German language. There I went to local as well as international schools. I spent two years in the Swiss International School, Basel – a German-English bilingual school, where I have been class representative both years as well as member of the student council, organizing various leisure activities including sports competitions and a student newspaper, proving my leadership skills. I have been a helper in a Christian summer camp in 2010 and 2011 in Switzerland showing another side of my personality.

I have done my IGCSEs one year ahead of time (in 2011) in Chemistry and French, both with a Percentage Uniform Mark of 100%, which is equal to an A\*. Back in Hungary I have done the higher-level exam of High School Graduation in German and English language in 2011 - 3 years ahead of time at my current school (Revai Miklos High School, Győr, Hungary).

Apart from mathematics, I have developed a keen interest in (computational) biology. During the summer of 2014, I have been a summer student at the Friedrich Miescher Institute for Biomedical Research (FMI) Basel, Switzerland in the group of Dr Botond Roska, working on the automatized tracing of dendritic trees in the retina, which project is still going on. There I was able to use my logical thinking, programming skills – in Mathematica – and mathematical problem solving skills.

Moreover, I have a keen interest in music and I have been playing the piano since 2004 in a music school. Sport is also an important and integral part of my life – swimming, rowing and running are my favourite ones.

During my university years, I am looking forward to learn new concepts and ideas of mathematics in an inspiring international atmosphere. My dream is to improve our understanding of mathematics via research and hopefully apply it to make the world a better place.