

## **Personal Statement**

I've always been interested in Mathematics since my early childhood. When I was taught Mathematics at primary school, I couldn't get the problems off my head until I find their solutions. It was like the whole world has stopped existing until I could figure out the solution. This hunger for truth has never left me since.

When I entered into High School, I had to choose a main subject and I naturally picked Mathematics over all the other subjects. Mathematics are the search for Truth, it's the hidden substance behind every technology that has ever been created. Everything we see in our environment can be described using Mathematics and the world would have not been what it is without it.

My first year at the university has been awesome because I discovered a new scientific area that is algorithms and programming languages. With this new tool, I was able to solve quickly many mathematical problems. Then, I thought about a way to combine both mathematics and programming.

Numerical Analysis is a branch of Mathematics that tends to solve problems by using and developing numerical methods. As we know, life is not a straight line, and sometimes, it is not easy to find the exact solution of a problem. In such a case, Numerical Analysis will approximate the solution of the problem. I found in Numerical Analysis a way to fulfil my passion for mathematics and programming. Algorithms and schemes convergence, consistency and stability are studied theoretically and then, implemented on a computer. I'm also deeply interested in Numerical Analysis because it's a field that can be applied in industry. An example is the complex heat transfer that has been solved for IBM by using Numerical Analysis.

I had taught mathematics to High school students when I was studying at the university. I really enjoyed it and I picture myself as a university senior lecturer in numerical analysis after doing my PhD. I believe my past and current experiences have prepared me for this noble task.

Throughout my Undergraduate training, I took many courses in mathematics, especially the course of numerical analysis and I learnt programming in C, C++, R and numerical simulation with Scilab. Here at the African Institute for Mathematical Sciences (AIMS), our Master's program includes diverse courses in pure and applied mathematics as well as some programming languages such as Python, SageMath, R and Geogebra. I am confident enough that I have all it takes to succeed in your program.

The main reason why I choose the Berlin Mathematical School (BMS) is because it offers a Research and Teaching Area in 'Numerical analysis and scientific computing'. Studying at BMS will help me to develop further my interest in numerical

analysis and enhance my research abilities. Also, I'll be working in a new and motivating environment where I would get the opportunity to attend workshops, seminars and interact with a welcoming and diverse mathematical community.