

Helena van der Merwe Applied Mathematician

I am an applied mathematician and Research Assistant in the Department of Geography at Cambridge. I am involved in climate modelling, linking carbon emission to temperature changes on the Earth's surface.

I have a BSc degree in Applied Mathematics and Physics from Port Elizabeth, South Africa. South Africa is a third world country and it is a great privilege to attend University there. Studying past High School is very expensive. I am lucky my parents saved for my education and I worked hard at school to be awarded a scholarship.



After my degree, I moved to the University of Cape Town to do my MSc where I created computer models to test the strength and durability of small metal components used in Coronary Artery Bypass operations. I found this research rewarding, because my data could be used to help make decisions on further developing a product that could save people's lives.

After my MSc, I spent a year teaching mathematics and science at an underprivileged school. South Africa, like so many other countries, has a shortage of maths and science teachers and I believe it is important to give knowledge back. It was a very difficult year, to see people who have so little and then go home to my nice house every day. I learnt a lot and hopefully managed to inspire some of my students to gain an interest in science.

I study applied mathematics because I am interested in all types of science research. It allows you to apply your mathematical skills to any number of different problems from engineering to finance to nature and many more. In fact, with applied mathematics there are so many options that you will never get bored! You can always apply your knowledge to something new.



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