In my undergraduate and masters studies as an Electrical Engineer, I developed a strong interest in image processing and pattern recognition. I enjoy applying theory to practical problems in these fields i.e. "making things work". Following a masters that looked at non-linear system identification, I worked in the commercial sector, developing a wide range of image processing, data analysis and pattern recognition systems. Significant projects I have been responsible for include a license plate recognition system, a hyperspectral mineral identifier, a diamond colour and quality classifier and a sub-seafloor seismic volume generator. For the past seven years, I have worked in research environments at DebTech and De Beers Marine R&D. I have had a passion for developing technical software since my undergraduate years and through my career I have gained a wealth of experience in this area. I believe a software engineering background is an advantage in my research field as it provides the flexibility to implement custom algorithms rather than being tied to limited and often expensive off-the-shelf software tools. Recently, I have been involved in some exciting remote sensing work, including the processing and visualisation of seismic data captured by an Autonomous Underwater Vehicle (AUV).

While I have thoroughly enjoyed the challenge of the technical work I have done, a growing concern for the sustainability of humanity's current relationship with the natural environment, and a love of research, has inspired me to start a PhD in earth observation. I believe my background and experience are well-suited to this field. Given the global nature of the climate problem, there is an urgent need to quantify and monitor aspects of the earth system, such as the carbon cycle, on a large scale.

Ultra-violet