



// Knowledge Transfer Partnership

// Ben Roullier

// Senior Research Engineer

// Bio

I've always been interested in maths, science, engineering, and video games. My role at Bloc lets me combine those interests to develop new products and processes in a range of exciting fields.

// Tell us about your role

I spend most of my time at Bloc researching cutting edge technologies and developing new software to take advantage of those technologies for the benefit of my colleagues and our customers.

As well as desk-based research and development, I spend a lot of time liaising with our customers and research partners in industry and academia, and often work on site to test new products and technologies.

// Why did you choose the industry?

I've been interested in using computers to solve engineering challenges since I was a teenager. After applying my skills in a few other industries, I chose to work in software R&D as it allows me to moonlight in different areas all the time. One day I'm working in aerospace, the next I'm in nuclear, automotive, medicine...

// How did you get into this industry?

I completed a doctorate in computational modelling for chemical engineering in 2016. While working on my doctorate I realised that I enjoyed the "computational modelling" part much more than the "chemical engineering".

After my doctorate I started a job developing software to model railway networks, during which I was

introduced to data science and machine learning.

After a while, I wanted to do research again so I applied for a Knowledge Transfer Partnership (KTP) project at the University of Derby, for which Bloc Digital was the enterprise partner. I worked with Bloc Digital on the KTP, and have continued to work with them since the project finished in 2021.

// How could others follow your route to industry?

If you're interested in research, asking around at colleges, universities and high-tech companies is a great start to finding positions. Don't be afraid to jump into projects and industries you're unfamiliar with, the beauty of research is figuring it out as you go along! Networking is a key skill, your customer today could be your colleague tomorrow.

// Top Tip

Researchers are always interested in shiny tools and new technologies, but often the simplest approach can be the best. If it ain't broke...

// Are there any sources of information you would recommend?

I like to know how things work from the bottom up, rather than just knowing how to apply them. "Learn Python the Hard Way" and "Data Science from Scratch" are two books I've found very useful. **Udemy** and **Coursera** online courses can also be very helpful.

