

Partner Spotlight



A Junior Engineer Case Study



IET Corporate Partner

Introducing Artur Majchrowski

A Reliability Engineer with an MEng in Electrical and Electronic Engineering who volunteers as a Primary School governor, Artur talks to us about his passion for engineering and what he has achieved in his career so far.

In conversation with... Artur Majchrowski - Sellafield Ltd

When did you decide to become an engineer?

I decided to become an engineer whilst in secondary school and after completing a prototyping project in my design & technology classes, where I was introduced to engineering. However, my intrigue with electronics started much earlier it was when I was just over 6 years old and I would disassemble old devices.

Was there anything during childhood or education that influenced your career choice?

I had a number of role models growing up, who have ultimately influenced my career choice. From a very early age I would accompany my father and ask a hundred questions on the everyday things he would be fixing. Later in school I was lucky to have a few notable teachers and lecturers that inspired me further, and through their passion for the subject, I pursued an electronic and electrical engineering degree with the aspiration of becoming an engineer. Ironically, my parents had to double-check if I had no interest in mechanical engineering instead!

How have you found your journey in STEM so far

Growing up in the 2000s, I was fortunate to attend a secondary school that specialised in technology.

Benefitting from design & technology classes in various disciplines and workshops and a wide range of tools to explore. Along with my mathematics and electronics teachers, through their enthusiasm, I was able to find my own appreciation for the subjects. It is why I was set on pursuing electronic and electrical engineering at university, which was one of my most memorable experiences. While getting used to submitting engineering reports and taking exams was challenging and took some adjustment; it made me the engineer I am today.

What has been your biggest success in your career

My biggest success in my career so far has been during my industrial placement scheme where, over the course of a year, I was able to rise up to new and complex challenges. With the support of my line manager, I took on the responsibility of completing the delivery of a project to improve the site's resilience capabilities. Working in a highly regulated industry, I was introduced to a suite of documentation and checks as part of a gated process to ensure the adequate delivery of the project. It was a steep learning curve however I was able to build a business case and satisfy the requirements of key stakeholders in a comprehensive proposal. This opportunity developed my perception of engineering project delivery and I

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called upon this experience to help me complete my final year at university.

On the other hand, delivering the IET's Engineering Open House Day 2022 in my local area has been one of my most recent and rewarding experiences. Through several weeks of planning and the support of various businesses and teams, I was able to organise the event which welcomed over 100 children, aged 5 – 13, to experience what engineering is about.

What has been your biggest challenge in your career?

Although my greatest success, planning and organising the Engineering Open House Day has also been one of the greatest challenges I have undertaken so far. It was an exciting opportunity for me to lead on, being able to build on from my experience as a STEM Ambassador and through networking in the IET in West Cumbria community, I was able to find incredible support. The facility provided by Sellafield Ltd. was ideal for the occasion. Securing its use was the first major milestone. However, being based in a remote area, such large-scale STEM events are less common so reaching out to various engineering teams and local businesses meant that I needed to pitch the idea and gain their confidence. Hopefully paving the way for more collaborative future events for West Cumbria. Keeping track of all of the resources and schedules also challenged my organisation skills as I needed to simultaneously find ways to promote the event to parents and children. The team that I was able to build was incredible in producing marketing resources and communicating those out as a first of its kind event, to this scale. Being able to see the result on

the day was fantastic! Parents and their children were welcomed to Cleator Moor's Centre of Excellence and were greeted with a vast range of activities, thanks to the amazing effort from the engineers and STEM Ambassadors who supported the event. With only a few surprises; running the event on the day turned out to be the easy part!

Are there any exciting projects you are currently working on?

I'm currently working on the delivery of steel armour wrapping onto a cast iron cable joint. The work is around HV distribution between substations on legacy cabling which aims to reduce its hazard. Cable joints are crucial in running long lengths of cable as they form a firm connection between multiple sections. However, cast iron joints have the risk of exploding in rare circumstances. This results in iron shrapnel projectiles which pose a significant danger to any immediate workers. Undertaking work important to worker safety is always a priority and this job will also introduce me to new aspects of work planning that I'm yet to develop.

What advice would you give to young people looking at careers in engineering and technology?

Career fairs! They definitely make for the best interactions with some of the most enthusiastic engineers that companies have. Many companies also offer work experience opportunities that make for great CV and interview talking points. Colleges and universities often organise annual fairs, so finding a contact is a good way forward. Alternatively, some

companies run established work experience programmes so reaching out directly may also be an option.

What does the future look like and what are your goals?

There is always new and exciting work to be done, being proactive comes with the job. I look forward to beginning my new role and developing more skills while learning to establish myself as a reliable member of the team. Looking a little down the line; I'm working towards advancing my level of professional registration and attaining recognition as an Incorporated Engineer (IEng) through the IET.



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