

## ***Natalie Gristwood***

I am a native Geordie from Newcastle Upon Tyne where I grew up by the coast in Whitey Bay: now that I live in Manchester, I realise that I definitely took the beach for granted! I decided to stay local for university, although I still moved out of my family home and lived with friends in the city centre to get the full student experience and independence. I studied Electrical and Electronic Engineering at



Newcastle University, where I am very proud to have graduated in 2018 with a First Class MEng degree with Honours. During my degree, in my final year, I completed a 6-month industrial placement with Siemens Digital Industries, who also sponsored me during my university studies through the E3 Academy scheme. Throughout the scheme, I was fortunate enough to complete three summer placements and attend three summer schools. My favourite summer school was in beautiful York! We visited Drax Power Station (little did I know, my future employer does a lot of work at Drax) and the focus of the summer school was improving presentation skills. When I first joined the scheme, I hated presenting to a room full of people, but the workshop helped me

overcome this irrational fear and massively improved my confidence and in my current role, I now present to auditoriums full of people. With regards to work placements, I learnt the most during my final placement, where I integrated into the Large Drives UK team and I designed a drying rig for water-cooled medium voltage drives. This involved creating process indicative diagrams and electrical panel designs, as well as programming the PLCs and HMIs.

After graduating university in 2018, I joined the Siemens UK Graduate Scheme, which is a two-year graduate development programme designed to support graduates in gaining experience and skills for Chartered Engineering status. I rotated around three different business units, where I completed six-month placements in Motion Control and Data Services, and then completed a twelve-month placement in Industrial Security Services. In Motion Control, I acted as team lead for the SINAMICS G120X product launch in the UK, where my duties included project management, acting as the main point of contact for a third-party marketing agency, updating the G120X landing page and performing product demonstrations. In Data Services, I was part of the MindSphere applications development team, where I improved my coding skills and gained knowledge of the MindSphere portfolio, and partner relationships as well as other business units across Siemens.

For my final placement I integrated into the Industrial Security Services (ISS) team, where I took on a highly challenging new role working towards becoming an Industrial Security Consultant. During this time, I developed a number of digital tools that have fundamentally changed the way we are able to work with customers. One of the services ISS offer is cybersecurity audits for industrial facilities and I created a digital tool that has reduced the time taken to create the reports for these audits by 70%. This saving has already had a significant impact on our business, as our consultants and engineers are able to spend less time writing reports and more time with customers. I have also created an online sales tool that enabled the whole sales force to engage with their customers on the topic of cybersecurity. Many customers are unaware of their cybersecurity needs and have never invested in the area, meaning that it is often a difficult topic for our sales team to approach.

I completed the graduate scheme in October 2020, when I was very proud to have been awarded the Siemens UK Graduate of the Year Award. My current position is an Industrial Security Engineer in our delivery team within Industrial Security Services. Cybersecurity is the backbone of digitalisation and as Siemens is leading the way with industrial digital technologies, we must also help our customers to implement these technologies securely. The advancing digitalisation of industry increases the risk of cyberattacks; therefore, I provide guidance and support on how to protect the productivity and availability of systems to achieve comprehensive plant protection. Our team offers a range of products and services, which often start with security audits or assessments, which then leads on to us implementing security measures (such as firewalls, industrial anomaly detection and endpoint protection). My main duties and responsibilities are in implementing security solutions and supporting project teams in conducting security-related activities.