

# Sophie Ebsworth Bsc.(Hons) EngTech TMIET

A qualified Senior SCADA Engineer with a First-Class Hons Degree in Electrical and Electronic Engineering. Interested in advancing my career as a Front-End Web Developer. A member of the Institution of Engineering and Technology with Engineering Technician accreditation and am currently in the process of applying for Incorporated Engineer (IEng) status. Gaining engineering & industry knowledge through a Siemens UK Apprenticeship scheme which lead to be nominated and winning awards, which are listed below:

- Nominated for 2015 Apprentice of the year for Siemens Rail Mobility
- Nominated for 2015 Apprentice of the year for Siemens UK
- Nominated for 2016 Apprentice of the year for Siemens UK
- Won 2016 Apprentice of the year for Siemens CIS
- Won Highly Commended for Higher Apprentice of the year Siemens UK 2017

## Skills

- Team Work
- Communication
- Problem-Solving
- Hard-working
- Focused
- Organised
- Time management
- Motivated
- Adaptable
- Full UK Driving License

## Experience

JANUARY 2024 – MAY 2025

### Senior SCADA Engineer / Siemens Mobility Ltd

I rejoined Siemens as a Senior Design Engineer in 2024 after a 6-month break and since then I have been involved in many projects:

- **Windows 10 Defects:** This project focused on updating the Windows operating system across the UK ECRs to ensure system harmonization. Although the project was not initially closed out due to outstanding issues, these responsibilities were handed over to me, and I took ownership of resolving the remaining issues and successfully closing out the project.
- **Kensal Green Minor Works at Didcot TVSC:** This project focus on SCADA updates to bring an existing 25kV circuit breaker back into service, providing a direct feed to the Crossrail Depot Lines 1, 2, and 6. As the Senior SCADA Design Engineer, I was responsible for updating the database and mimics of the Power SCADA system for each stage, writing test readiness reports, and drafting site methodologies for commissioning.
- **York REPLAY Replacement Project:** This project involved implementing a data diode at the York ECR to enable Network Rail to securely access data from the SCADA system for maintenance purposes. I served as the Project Engineer, responsible for maintaining project timelines and acting as the primary point of communication with the customer. Due to workload demands, I was involved in this project for a few months before being reassigned to the ECI CSIP project.
- **ECI CSIP (Early Contractor Involvement Central Line Signalling Upgrade Project):** This project focused on developing a maintenance facility solution for the London Underground Central Line to accommodate new tube trains as part of a signaling system upgrade. This exciting and challenging project allowed me to be creative and work within a team across various offices to develop a

design. It involved significant learning, as I need to understand the current SCADA system, the different stages of the project and signaling systems involved.

- **Northern Track & Train Bid** – I was the Senior SCADA Engineer responsible for developing a SCADA solution for new battery-operated trains to be charged at stations. I put together a SCADA solution to enable control and monitoring of the new RCCs (Rail Charging Converters), including pricing and a materials list, to support the business in submitting a competitive bid for the contract.
- **Version Control Process Improvement** – Toward the end of my time with Siemens, I worked for the Engineering Manager to develop a report outlining how the business was currently using Plastic SCM, identifying areas for improvement, and highlighting version control best practices. The outcome was the creation of a standardized process that all departments and project teams could follow to minimize problems and inefficiencies.

#### **JUNE 2023 – JANUARY 2024**

##### **Project Engineer / VINCI Energies - ACTEMIUM Automation**

I gained experience using Aveva InTouch HMI to design and create mimics for Heathrow Airport Jet Fuel project. I was in the water industry team, so I was exposed to water treatment sites and getting the relevant knowledge on water standards and certificates to work onsite.

During my time with Actemium, I completed a Front-End Development course outside of work, which I thoroughly enjoyed. I learned how to create and design websites, allowing me to apply my creativity by developing websites for various projects. This is an area I am keen to develop further and build upon my existing skills.

#### **OCTOBER 2021 – MAY 2023**

##### **Senior SCADA Engineer / Siemens Mobility Ltd**

During my time at Siemens, I had 4 different job roles and involved in many Railway projects both UK and international. The project I worked on as a Senior Engineer is listed below:

- **Riyadh Metro** – I worked on this project as the Scrum Master with the responsibility of managing a team to develop the user interface of the Facility SCADA system for Line 1 & Line 2 using Polarion as the tool to manage and plan the workload and resource. I have also been a team leader and engineer on this project, I continued to be involved in the development of the SCADA system but mainly was involved in planning, team management and working with the project team to deliver customer needs. On this project I was able to get training and experience in Agile, use Polarion as a management tool and learn how to manage a team.

I am highly competent in Microsoft Office, Plastic SCM for version control, and Polarion for project lifecycle management. I have practical knowledge of IEC 61850 and DNP3 protocols and am skilled in understanding and writing code in Pascal, Delphi, SQL, and C. Additionally, I have completed a Microsoft SQL Server training course and received training in Agile Ways of Working and Powerful 121s for Managers.

#### **JUNE 2018 – SEPTEMBER 2021**

##### **Systems Delivery Engineer / Siemens Mobility Ltd**

As a Systems Delivery Engineer, the projects I was involved in are listed below:

- **Riyadh Metro** – Joined the project as an engineer to develop the user interface of the Facility SCADA system for Line 1 & Line 2 of the 6 Line Riyadh Metro. The Facility SCADA system interfaces with multiple subsystems mainly passenger information systems such as CCTV, PA, PIDS, Help Points.
- **Greater West Electrification Project** - I had the responsibility to develop and maintain the database of 30 sites on the Power SCADA system that operates the Great Western Railway. I was also the key engineer to communicate with the test team and give them test releases. This project also allowed me to get site experience at Electrical Control Rooms and railway substations.
- **Midland Main Line London to Corby Project** – I had the responsibility of developing a new configuration for a Fastflex Compact RTU which acted like an IED (Intelligent Electronic Device). This

configuration is now being used in Compact RTUs on the London to Corby Route to electrify the route.

- **SCADA Training Project** - As part of my degree dissertation I had a work-based project which involved working with a team of people to create a training system for the in-house training & development team for them to train and showcase what the business does. I had the responsibility of creating a circuit break simulator and sharing the role of project manager.

**DECEMBER 2017 – JUNE 2018**

### **Assistant Engineer / Siemens Mobility Ltd**

For the 6 months of being an Assistant Engineer I worked on the Greater West Electrification project as a database engineer. As part of this project the team had implemented the world's first new protection scheme called Rationalised Autotransformer System (RATS), which led to Siemens winning Innovation of the Year at the National Rail Awards 2018 with business partners on the project. Along with my day job, I attended college one day a week to achieve my qualifications.

**SEPTEMBER 2014 – DECEMBER 2017**

### **Higher Apprentice / Siemens Mobility Ltd**

As an apprentice I gained various skills and knowledge by working with different engineers and departments. I moved around the business to learn and understand how the business works but also the products of the business. Again, I worked on various projects with different responsibilities:

- **Qatar Education City** – I had the responsibility to design & develop the Graphic User Interface of the Passenger Information SCADA System.
- **Greater West Electrification Project** – I started as a Tester, ensuring the Power SCADA system was fit for purpose, before moving on to a database engineer.
- **Cathcart Upgrade Project** – I briefly worked on this project as a database engineer to upgrade the Power SCADA system.

Along with work I also had to attend college for 1/2 days a week to achieve my qualifications.

**2008 – 2015**

### **Sales Assistant / Ebby's Ice Cream Parlour**

This role within my family-owned business involved managing cash transactions, providing high-quality customer service, and ensuring a positive customer experience at a variety of public events, including cricket matches, concerts, and summer fairs. I was responsible for interacting with a diverse range of customers, addressing enquiries, and maintaining a friendly and professional manner in fast-paced environments.

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## **Education**

**2023 – 2024**

### **Front End Development / edX Boot Camps**

Grade awarded – 97% Pass Rate

**2017 - 2019**

### **BSc (Hons) Electrical & Electronic Engineering / University of Derby**

Grade awarded – First Class (Hons)

**2016-2017**

### **HND Electrical & Electronic Engineering / Loughborough College**

Grade awarded – Distinction

**2014-2016**

**HNC Electrical & Electronic Engineering / Loughborough College**

Grade awarded – Merit

**2014-2017**

**Level 4 NVQ Extended Diploma in Engineering Manufacture / EAL (Siemens)**

Grade awarded – Pass

**2014-2016**

**Level 2 NVQ Diploma in Performing Engineering Operations / EAL (Loughborough College)**

Grade awarded – Pass

**2012-2014**

**A-Levels / Peter Symonds College**

Grades awarded – C, D, D, E

**2012-2013**

**AS-Levels / Peter Symonds College**

Grades awarded – C, D, D, D, E

**2007-2012**

**GCSEs / Thornden School**

Grades awarded – 5 A's, B, 2 C's and Distinction

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## Activities

Throughout my career, I have been passionate about encouraging the next generation—particularly women—to pursue STEM (Science, Technology, Engineering, and Mathematics) subjects and consider careers in engineering, where there is a well-known gender gap. This commitment led me to become a STEM Ambassador for several years, during which I gained valuable experience volunteering at events such as Greenpower and delivering presentations to students and industry groups.

Outside of work, I enjoy traveling and exploring different cultures, which broadens my perspective and fuels my curiosity. I also love food and enjoy trying out new restaurants whenever I can. In my free time, I like spending time in nature, taking long walks with my dog, practicing yoga, reading, and watching films and TV shows.

**REFERENCES ARE AVAILABLE UPON REQUEST**