

Data Scientist Improves Lead Generation Efficiency by 13x, Saves 48 Hours per Month

Elle Neal is a Data Scientist at BPA Quality, a provider of quality assurance services for customer contact centres. Elle's work focuses on cleansing and analysing call and other customer interaction data identifying any abnormalities to raise with BPA's customers, helping them drive revenue growth, improve net promoter score and more.

Excel to Python and beyond

Elle has been working with customer and research study data—thousands of rows of it—for years. Relying on Excel to process that much data would be cumbersome and BPA Quality encourages staff to research and adopt technical solutions to meet client needs as effectively as possible. Elle started learning Python independently and was delighted to be able to apply it in her work right away.

As she advanced with Python, Elle knew she would need support and resources to make the most of her new solutions. BPA have chosen to partner with Cambridge Spark to support skills development for their team.



“ I had researched other providers of apprenticeships. But the thing that stood out for me with Cambridge Spark was the focus on business. You can apply data science in many different areas. But with Cambridge spark, they will help you directly apply your learning to solve real problems in your business. And for me that was like... Wow!”

Elle Neal
Data Scientist

Learner Profile

Company: BPA Quality
Job function: Data and Analysis
Job title: Data Scientist
Industry: Outsourced Quality Assurance
Company Size: ~500 employees
Programme: Level 7 Data Science & AI



Filling gaps in knowledge

Elle and her team track call metrics like customer satisfaction, first-call resolution and average handling times. They compare these metrics to a historical dataset to monitor trends and flag any anomalies to investigate with customers. Each such anomaly found through their analysis represents a lead for a customer and a potential opportunity to grow their revenue or improve processes, training, customer journey, etc.

But the team has to clean and prepare the data before they can actually analyse it—a tedious process in Excel. This also takes time away from their analysis work and the value they can bring to customers.

The apprenticeship gave Elle a look "under the hood" for a better understanding of how data science works. From the first learning module, Elle was translating formulas she had written in Excel into Python for faster data processing. Within three months, this new method helped Elle include more metrics for comparison in her model, adding value for customers while driving a 13x increase in the number of leads generated per hour, saving 48 hours per month across two processes.

“Doing the apprenticeship has helped me glue everything together and fill the gaps in the knowledge I had to make me more confident in delivering the data science models I want to create.”

Elle Neal
Data Scientist

Results



48 hours per month saved

by switching from Excel to Python for data processing and analysis



13x more leads generated per hour

through added Python functions and statistical analysis methods



AI & Data Science Apprentice of the Year

awarded by Cambridge Spark for trailblazing machine learning and AI

Succeeding with support and a passion for data science

Having discovered her passion for data science before choosing to participate in the apprenticeship, Elle says that passion has been a key driver in persevering through the demands of the programme.

Proper self care and time management have also been crucial to balancing home and work life with her learning.

And apart from the generous support she received from her organisation, she says her learning coach and data mentor have been "incredible" in how they've accommodated her needs, encouraged her to explore applying disruptive technologies in her work and more.