Senior Data Scientist

Exeter, Devon

Website Sparx
Illuminating Learning

Location: Sparx Head Office in Exeter.

Term: Full time, Permanent.

Salary: £highly competitive depending on qualifications and experience.

About Sparx

Here at Sparx we’re using a scientific and research based approach that takes the guesswork out of education. Through data and real world classroom observation, we’re investigating what makes the best learning experience in order to improve educational outcomes for students, today and tomorrow.

Our platform for Maths uses custom-built content and a powerful, data-driven web and mobile framework to deliver a tailored set of exercises, games and incentives that are redefining the limits of what young people can achieve.

We’re looking for people with a real passion for education and a belief in the power of technology to improve it. People who want a challenge; people who want to make a difference.

Job description

As a Senior Data Scientist at Sparx, you’ll be integral to the team from day one, helping to make decisions, shaping team objectives and driving both your own and the rest of the team’s technical expertise and potential.

You’ll be carrying out research and analysing vast amounts of data to investigate how technology can be used to optimise learning. You’ll be blending the use of maths, analytics, algorithms and your understanding of human behaviour on a daily basis to drive the development of the Sparx system and inform strategic decisions. Working together with our team of Content Scientists you will be developing engaging new ways to teach topics that unlock a whole new world of understanding for students.

Key responsibilities

- Show what’s working (and what’s not) on the Sparx system through the analysis of data, observation of school lessons, and talking to teachers.
- Put the data through its paces, performing rigorous statistical evaluation to look at the bigger picture, and provide actionable solutions and insights that will guide product development.
- Develop and implement sophisticated algorithms and analytical routines to work in real--time and with historical data.
• Proactively problem solve and provide suggestions and theories for improvements in lesson flow, content, rewards and the algorithms that underpin it all, as well as developing new tools and procedures to improve Sparx.
• Produce compelling visualisations, displaying data in appropriate formats that both scientists and non-scientists are able to understand and use.
• Work with the wider Sparx team to ensure the product is the best it can be.
• Be positive and infectiously enthusiastic about the values and vision of Sparx.

About you
You’re a champion of the scientific method with a rigorous, disciplined approach and ruthless attention to detail. Complicated mathematics comes naturally to you, and you’re at home working with vast, messy data sets. But you’re equally happy to use a simple solution if that’s the right way to approach a problem and not get excited by complexity for its own sake. You’ll also be able to simplify complex ideas and communicate them clearly to those without the same analytical skills as you, validating your own findings and explaining their implications to a varied audience. With an insatiably inquisitive nature and razor sharp analytical skills, you’ll be a natural at using data to question, challenge, solve problems and tell stories beyond just pointing to the numbers.

On the whole, you’re a whirlwind of activity: proactive, dynamic and enthusiastic, able to multi-task and focus on the detail, without losing sight of the bigger picture. Things move quickly at Sparx so you’ll be able to work under pressure, to tight deadlines and be able to adapt in the face of constantly changing priorities and a fluctuating workload. Overall, you’ll be committed to the success of the project, and a great team player.

In terms of specifics, the list below gives an overview of some of the skills and experiences we’re looking for:

Essential

• Minimum 2:1 degree in Statistics, Mathematics or a related subject.
• Demonstrated experience in analysing large data sets using R, Python or similar.
• You will either have a Postgraduate qualification in Statistics or a related subject plus active research
• You will have demonstrable commercial work experience.

Desirable

• Teaching and/or tutoring experience and knowledge of education and the school system
• People or project management skills

Our team
We’re about living life, not putting it on hold. Our generous benefits include substantial holiday leave and the chance to join our company pension. We have a range of on-site facilities for all employees to use free of charge. On site we have a netball court, a five-a-side football pitch, a running track, a pool table, an Olympic table tennis table, as well as an on-site gym with classes
throughout the day. Our café serves delicious, local, and organic food. Did we mention it’s all free? On top of this you’ll have great views from your office window of the foothills of Dartmoor and boats out at sea on the horizon – with the beach just 20 minutes away. Plus, we’re constantly organising events and activities to support our charities, and to socialise. Our work is serious but we’re all about having fun while we do it!

To find out more, and to see the other roles we are recruiting for, please visit our website at www.sparx.co.uk.