Backend Engineer - Digital Publishing

You'll be part of our API and Data team in the Digital Publishing division at the Office for National Statistics. As a Backend Engineer, you'll build robust data import and export pipelines and APIs for internal and external use.

You'll thrive using agile methods and enjoy working openly, collaboratively and as part of a multidisciplinary team of front-end engineers, back-end engineers, site reliability engineers, interaction designers, user researchers, service manager, product owner and performance analyst.

As a member of the Digital Publishing team, you'll share responsibility for:

- The ONS website – https://www.ons.gov.uk
- Our API - https://api.ons.gov.uk
- Our developer site – https://developer.ons.gov.uk
- Our performance dashboard – https://performance.ons.gov.uk
- Florence (our CMS) – https://github.com/ONSdigital/florence

Our current back-end technology stack includes Go, Java, Python, Apache Kafka, MongoDB and Neo4j. You'll also contribute to some front-end components built with Go.

Main responsibilities

- build APIs for internal and external users to access, filter and download statistical data and metadata
- build Kafka powered data import and export pipelines to import, store, publish and export statistical datasets
- build automated tests to support our continuous integration environment
- support the day to day operation of our live services, through investigating and fixing live service incidents, performance improvements and ongoing maintenance
- share knowledge of tools and techniques with your team (both developers and non-developers) and with the wider backend community

Things you might be working on in a typical day

- design and build APIs for internal and external users
- extend our data import and export services to support new datasets
- participate in technical planning, design and code reviews

What we'll do for you

- provide you with training, mentoring and support from an experienced multidisciplinary team
- give you the freedom to work with modern and relevant technologies including Go, Java, MongoDB, Neo4j and Amazon Web Services with a MacBook Pro development environment

Skills and experience

These are the skills and experiences that might be suitable for this role. An interest in solving the problems we face is much more important than having experience in everything listed.

- experience in back-end development, ideally within a distributed systems environment hosted on public cloud infrastructure
- experience of Go, Java or Python
- experience of developing in microservice and event driven architectures
- understanding of software design principles and techniques for building secure, maintainable and resilient services
- experience of search technology, e.g. Elasticsearch
- awareness or experience of machine learning tools, libraries, algorithms and natural language processing
- experience of mentoring and supporting junior engineers
- ability to quickly research and learn new programming tools and techniques
- a systematic approach to solving problems, and using testing to validate solutions
- understanding of agile environments and version control
- an understanding of data and web security including encryption, standards compliance, OWASP and common attack vectors
- an awareness of technologies used for web applications, e.g. HTTPS, JSON and CDNs, and use of Unix-like operating systems, e.g. Linux and/or Mac OS