

Job title	Senior Software Engineer		
Job family	Technology, Systems & Delivery	Proposed band	D

Job purpose
Responsible for the design of software, and for implementation and operation of effective software and tools.

Key responsibilities and accountabilities
<ul style="list-style-type: none"> • Lead the design and development of effective software that meets complex product and business needs • Review and give constructive feedback on others' code • Drive work to successful completion across the immediate team • Write appropriate tests using automated test driven techniques for ensuring code quality and coverage • Integrate the software with monitoring and support tools • Ensure the teams software works in its operating environment • Write, review and take responsibility for technical documentation • Lead troubleshooting and resolution of issues throughout the product life cycle, including out of hours support for incident resolution • Participate in and lead as required, the team's agile planning and delivery process • Effectively participate in and help improve the teams software development methodologies, such as pairing, code and documentation reviewing and continuous delivery • Work with project, product and technical leads to design software and create implementable specifications and tasks at feature and component level • Work with 3rd Party ("Indies") where necessary offering direction, support and documentation • Mentor and coach more junior staff. Provide technical leadership and direction to peers and colleagues. Line Management of 1-2 software engineers (if appropriate) • Learn new technologies and keep abreast of existing technologies and help introduce them where appropriate

Knowledge, skills, training and experience
<p>Essential</p> <ul style="list-style-type: none"> • Extensive experience writing and maintaining large scale robust production software in a fast changing environment with rapid release cycles • Expertise in one or more mainstream development language/frameworks • Expertise with one or more mainstream development and deployment tool chains (IDE, SCCS, CI) • Competence in database design and use in software applications • Expertise in web architecture and key technologies (HTTP, DNS, distributed design) • Expertise in test driven development and broader testing and QA concerns • Expertise in developing for operational and non functional concerns (monitoring integration, performance testing, scale, availability and resilience, security considerations) • Extensive experience of project working and professional software development processes, including agile

- Competence in translating product requirements into technical solutions
 - Demonstrable experience in using design patterns
 - Effective leadership and collaboration inside and beyond the team. The ability to influence diverse stakeholders effectively
 - Takes responsibility for driving work to completion across the team
 - Technical Lead on at least 1 Medium/Large sized project (3 months +)
- Desirable**
- Worked on multiple projects or codebases concurrently
 - Software Engineering or computer science degree or equivalent
 - Experience of mentoring and supporting less experienced members of the team

Job impact

- Decision making**
- Write, review and take responsibility for technical documentation
 - Collaborating with stakeholders and product managers to understand business requirements and influence product requirements
 - Design and communicate the design of software features or components that meet business and product requirements
 - Leads and implements software to meet business and product requirements independently
 - Review others' work and give constructive feedback for improvement
 - Resolve operational incidents, deciding on immediate and follow up actions and improvement plans
- Scope**
- Finance: Responsible for headcount budget of £125k*
- Line Management: Mentoring of more junior staff. Line management of 1-2 staff*
- Ad-hoc Teams: Participates in ad-hoc teams with up to 30 members
Participation in process or technology strategy working groups as SME or to represent their team/division
Participation in cross divisional forums for improvement of share tools and practices
Occasional participation as temporary member in another unit or department as SME*

Other information

For Reward team use only

Job Code	
Definition:	Content

JOB DESCRIPTION



This job description is a written statement of the essential characteristics of the job, with its principal accountabilities, incorporating a note of the skills, knowledge and experience required for a satisfactory level of performance. This is not intended to be a complete, detailed account of all aspects of the duties involved.

Appendix

There may be sub-sets of the generic job described above which require additional technical skills. This appendix to the generic job description can be developed to cover such situations.

Division	D&E, CPW, Data Solutions (Telescope)
Reports to (title)	Engineering Manager
Location base	W12, The Energy Centre

Organisation structure	
Introduction	
<p>We are looking for an enthusiastic senior software engineer to join the Data Solutions team working on Telescope. Telescope is an in-house analytics tool born in the BBC newsroom and growing to serve the rest of the organisation thanks to its friendly language and bespoke charting for easy to understand visual data.</p> <p>The tool is helping to deliver strategic organisational goals around engaging young audiences and expanding our global reach. We hope to support our content creators in their efforts by ensuring that as many of them as possible have the relevant audience data to hand in order to make better, quicker decisions about commissioning, optimisation and distribution.</p> <p>The Data Solutions team is made up of both engineers and data scientists, and we work closely together in order to ensure that we are delivering accurate and meaningful data to our creators.</p>	
Responsibilities	
<p>As the successful candidate, you will be joining an agile team who work in bi-weekly sprints, using Scrum boards, following guides and designs from our user experience team. You will be responsible for your own documentation and tests, and will use Github to commit your code to be reviewed by your peers.</p> <p>Further more, you will be looked upon to uphold code standards and practices as well as encouraging and avocating contributions to open source and other community participation.</p>	
You will be using the following technologies:	
<p>Front end - React, Typescript, Styled Components (SASS), Jest, Apollo, D3 Back end - NodeJS, ES2018, Python, GraphQL, MongoDB, ElasticSearch, Redis Cloud - AWS (EC2, S3, SQS, SES, Lambda, Cloudfront), Jenkins, Github</p>	

Additional job specific responsibilities and accountabilities
Are you the right candidate?
<p>We are looking for an engineer with a broad knowledge of web technologies however it is not essential for the candidate to have a computer science degree or enterprise experience. We want to meet folks who have enthusiasm for code, enjoy the task of problem solving and have a strong willingness to learn.</p>
When writing your application, please tell us about any of the following experiences:

- Designing and developing software using different programming languages
- Consuming or creating RESTful or GraphQL APIs
- Security practices while developing cloud-based services
- Accessibility practices while developing websites
- Learning on the Job
- Troubleshooting bugs
- Pairing with and mentoring other engineer to share knowledge and practices
- Architectural system design
- Testing strategies
- Visualising data
- System architecture

Additionally, any experience in the following would strongly valued:

- ETL Pipelines
- Deployment Pipelines
- Mentoring, presenting and evangelism
- R, SQL, Java, Scala
- Database Administration
- Cloud administration
- Processing big data

Approval	
Manager	Magda Piatkowska
HR Business Partner	
Date	03/07/2019