

# Job Description

**Job Title:** Data Scientist, Signal Processing

**Reports To:** Head of Technology

**Direct Reports:** 0-3

## **Job Purpose:**

To support the Senior Signal Processing Engineer in the definition and implementation of analytical tools and algorithmic methods to generate, extract, compare and contrast sub-cellular characteristics from high dimensional, datasets to support the user experience and value of Cytomos products.

To ensure the information embodied in Cytomos data is robust, insightful, relevant and accessible to our end-users, acting as a first point of escalation for the test teams.

To enhance Cytomos product and analysis application capabilities by developing and applying machine learning algorithms and other emerging technologies.

## **Key Responsibilities:**

- Planning, developing, implementing, and testing analytical algorithms to fully exploit and demonstrate the efficacy of Cytomos' proprietary sensing method in various bioprocessing applications.
- Provide a link between the Engineering and Biology teams to support the analysis of data and ensure information is robust, relevant and accessible to users.
- Work closely with the rest of the Engineering team to support testing and validation of new hardware through data analysis.
- Creating and maintaining accurate documentation.
- As part of a team work with Cytomos' established external contractors and partners for the development of software/signal processing/machine learning/data visualisation solutions.
- Writing Standard Operating Procedures (SOPs) and ensuring compliance with documentation standards.
- Engaging in daily meetings with internal and external teams to coordinate efforts and ensure alignment.
- Ensuring compliance with Cytomos' policies, procedures and guidelines, together with all relevant regulatory and statutory requirements.
- Where applicable work to regulatory standards throughout a software development life cycle (ISO9001).
- Engaging with the company's appraisal process, and demonstrate commitment to our values, behaviours and your continuous personal development.
- Performing other reasonable duties and/or projects as directed by your line manager.

## Knowledge, Skills and Experience

<b>KNOWLEDGE (&amp; QUALIFICATIONS)</b>	<b>Essential</b>	<b>Desirable</b>
BSc in Maths, Physics, Informatics, or equivalent subject.	X	
MSc in data science, signal processing, machine learning or similar		X
<b>SKILLS</b>		
Proficient in Python	X	
Proficient in MATLAB		X
Strong mathematical background, Statistics, Analysis	X	
Strong mathematical background, Signal processing		X
Experience in multivariate statistics	X	
Handling and interrogating high-dimensional data	X	
Data visualization techniques and tools	X	
Machine learning and AI tools		X
Good verbal and written communication skills	X	
Ability to work independently and within a close-knit team	X	
<b>EXPERIENCE</b>		
Graduate with MSc in relevant field without industry experience	X	
1-3 years of industry experience with developing algorithms for handling product generated data.		X
Experience in working to an ISO9001 standard		X
Experience in working with external contractors		X