# **Position Description**

**Position:** Data Scientist **Department:** Engineering

Reports to: Software Engineering Team Leader

**Direct Reports:** None

Role Purpose	The Data Scientist will play a key role in developing and optimizing a cloud-based analytics platform to support our IoT ecosystem. This platform will integrate seamlessly with IoT devices, such as chargers and batteries, provide APIs for third-party integration, and deliver intuitive and actionable analytics dashboards that enable data-driven decision-making for our customers.  The role will involve deep exploration and understanding of IoT-generated data, identifying critical metrics that bring maximum value to customers. You will design and implement robust data processing and cleaning pipelines, transforming raw data into high-quality datasets. By applying advanced data analysis techniques and developing machine learning models, you will extract meaningful insights from complex datasets, ensuring the analytics platform delivers powerful and scalable solutions tailored to our customers' needs.
Key Success Outcomes	Ensure IoT data is clean, useful, and ready for analysis, maintaining high standards of quality and consistency.
	• Uncover valuable insights through exploratory data analysis and effectively share findings with the team.
	Build and deploy machine learning models that accurately predict key metrics like alarms, lifetime estimates, and health status.
	Develop user-friendly APIs and impactful dashboards that make it easy for stakeholders and partners to access and understand the data.
	Work closely with software engineers to successfully integrate and maintain models in a reliable cloud-based environment.
	Produce clear, actionable reports and visualizations that help improve decision-making and product performance.
	<ul> <li>Collaborate effectively with software developers, and product managers to ensure data solutions meet business needs.</li> </ul>
	Communicate technical insights in a way that's easy for non-technical audiences to understand and act on.
	<ul> <li>Continuously improve models and processes by applying the latest tools and feedback from users.</li> </ul>
	Help improve product and customer fleet performance through thoughtful analysis and data-driven recommendations.
Key Internal	Software team, including embedded and frontend software development as well as test engineers.
Relationships	Product Manager/ Marketing Team.
	Project Management
	<ul> <li>Engineering teams including Engineering Services, Systems Solutions and Power Conversion &amp; Storage.</li> </ul>

	•	Other Enatel departments as required		
Key External Relationships	•	Internal and external customers Contractors		

#### **Key Requirements**

Accountability Area	Desired Outcome/Achievement Indicators	
Data Analysis and Preprocessing	<ul> <li>Clean, aggregate, and preprocess raw data collected from IoT devices to ensure quality and consistency.</li> <li>Perform exploratory data analysis to understand data patterns and relationships.</li> </ul>	
Model Development and Implementation	<ul> <li>Develop and evaluate machine learning models to extract insights such as alarms, estimated lifetime, state of health, and state of charge.</li> <li>Translate business requirements into data-driven solutions and algorithms.</li> </ul>	
Cloud Integration and Deployment	<ul> <li>Collaborate with software engineers to deploy and maintain machine learning models in a cloud environment.</li> <li>Implement APIs to deliver analytics and insights to third parties.</li> </ul>	
Visualization and Reporting	<ul> <li>Build interactive dashboards and visualizations to help stakeholders monitor key metrics and make informed decisions.</li> <li>Generate regular reports and insights to improve product reliability and performance.</li> </ul>	
Collaboration and Communication	<ul> <li>Work closely with cross-functional teams, including software developers, and product managers.</li> <li>Present findings and recommendations to technical and non-technical audiences.</li> </ul>	
Research and Innovation	<ul> <li>Stay updated on the latest trends in data science and machine learning.</li> <li>Continuously improve models and analytics processes based on feedback and evolving requirements.</li> </ul>	

#### Other duties:

- Upholds the company values.
- Perform any other tasks as required by your Team Leader and/or the business.
- Contributes to the achievements of department goals and objectives.

#### Health & Safety:

- Ensuring all Health & Safety policies and rules are followed, with all tasks completed in a safety conscious manner.
- Maintaining a safe and clean working environment by complying with Enatel Policy and Procedures.
- Leads by example in all matters relating to Health & Safety.

#### **Environmental:**

Enatel is committed to minimising the environmental impact of our operations and products.

Ensuring Environmental policies and processes are followed.

**Person Specification:** 

	Essential	Desirable		
Competencies	<ul> <li>Functional/Technical Skills - has the functional and technical knowledge and skills to do the job at a high level of accomplishment.</li> <li>Action orientated - enjoys working hard and is full of energy for the things he/she sees as challenging.</li> <li>Process Management - good at figuring out the processes necessary to get things done. Can simplify complex processes.</li> <li>Learning Agility - the ability to learn quickly in a new environment.</li> <li>Problem Solving - looks for opportunities to resolve issues and solve problems. Learns quickly when facing new problems.</li> <li>Integrity and Trust - is seen as a direct, truthful individual; is widely trusted.</li> <li>Ethics &amp; Values - Has an appropriate and effective set of core values and beliefs and acts in line with those values at all times.</li> </ul>			
Skills, Experience & Knowledge	<ul> <li>Proficiency in programming languages such as Python, R, or Julia for data analysis and modeling.</li> <li>Strong experience with data manipulation tools (e.g., Pandas, NumPy) and visualization libraries (e.g., Matplotlib, Seaborn, Plotly).</li> <li>Expertise in machine learning frameworks and libraries (e.g., Scikit-learn, TensorFlow, PyTorch).</li> <li>Knowledge of SQL and NoSQL databases for data storage and retrieval.</li> <li>Experience with big data tools (e.g., Apache Spark, Hadoop) and cloud platforms (e.g., AWS, Azure, Google Cloud).</li> <li>Familiarity with IoT data processing pipelines.</li> <li>Experience in API design and integrationExperience in deploying</li> </ul>			

	data models and solutions in a production environment, including using containerization tools like Docker or orchestration platforms like Kubernetes.  Experience in developing and deploying cloud-based analytics platforms or similar solutions.  Hands-on experience with IoT data streams and real-time analytics workflows.  Track record of designing and implementing machine learning models for business applications.  Experience in creating and presenting data visualizations and dashboards (e.g., Power BI,	
Qualification / Licenses	Bachelor's degree in data science, Computer Science, Statistics, Mathematics, Engineering, or a related field.	Certifications in data science, machine learning, or related fields (e.g., Google     Professional Data Engineer,     AWS Certified Machine     Learning – Specialty).      Certification in cloud platforms such as AWS, Azure, or Google Cloud.  Relevant IoT or MQTT protocol certifications (if available).