

## Data Engineering

Capstone Project by Chukwuemeka okereke

# Conveyor belt Steel Brazer analytics: Exploring the productivity of the steel brazer

Description: A project that seeks to explore the productivity of a steel brazer, using data from a Cardozo steel parts factory's daily work by hour sheet. The idea is to optimize the productivity of the steel Brazer by analyzing the data gotten and twerking its use to its maximum capabilities without causing quality issue.

Louis capstone project



#### Define the scope of your project



and most importantly, the things you will not do (out of scope)

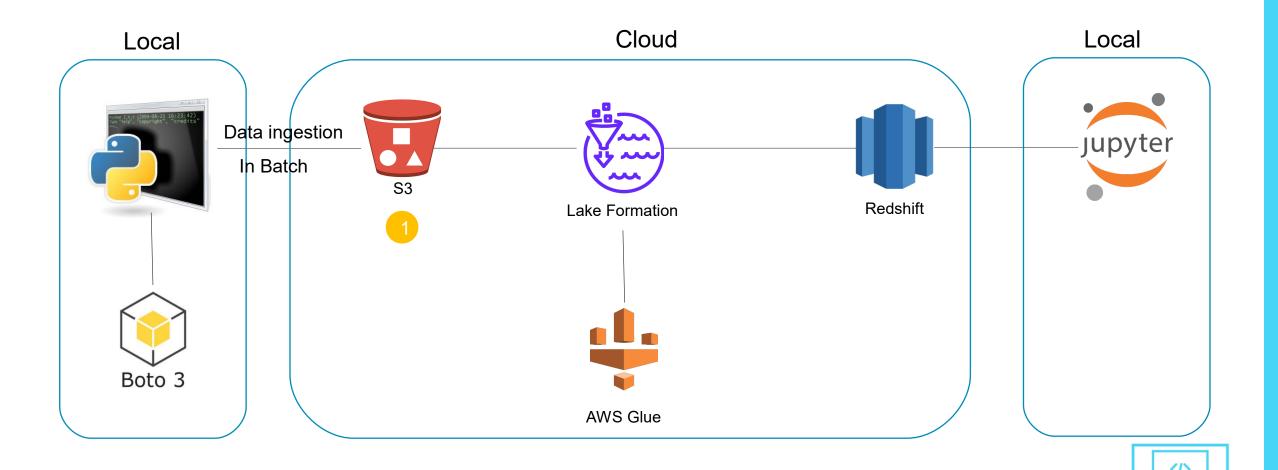
In the scope	Out of scope
<ul> <li>Info on daily brazed job hourly for one month by the steel brazer.</li> <li>Analysis based on operators operating the Steel brazer.</li> <li>Scrapped piece data to know defected brazing for quality.</li> <li>Reason for Scrapped product piece</li> <li>Analysis based on individual steel piece product</li> </ul>	<ul> <li>Profit from the product brazed</li> <li>Cost of Outsourcing brazing job vs cost of home production</li> <li>Resources used for production</li> <li>Analysis of every product</li> <li>Steel brazers temperature anomalies</li> <li>Operators off duty periods</li> </ul>

<<Write the main objective of your project here. What will be the main deliverable? These can be technical or "business" objectives.</p>

- Source for data.
- Model an RDS database using oracle modeling software
- Create a data lake and data warehouse using AWS console
- Identify products with the highest quality issue, using visual charts.
- Correlate external constraint like atmospheric temperature vs no of scrap part.
- Identify the most successful brazed product.
- Identify the least successful brazed product.
- Compare operators productions
- Identifying the most brazed part



#### **Technical Stack**



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### Thank you!

