

Questionnaire - Machine Learning Internship

Objective:

- Develop a machine learning model that can classify images of industrial equipment into two categories: 'defective' and 'non-defective'.

Tasks:

- Select or create a dataset that includes images of industrial equipment labelled as 'defective' or 'non-defective', with additional labels for the type of defect in defective images.
- Train a machine learning model to classify images into the two main categories.
- Evaluate the model's performance using classification metrics such as accuracy, precision, and recall.

Deliverables:

- A Jupyter notebook or Python script with the code for data preprocessing, model training, and evaluation.
- A report summarizing the methodology, model performance, and insights gained from the analysis.

General Evaluation Criteria for All Assignments:

- Understanding of Problem Statement: Demonstrates a clear grasp of the assignment objectives and the specific challenges that need to be addressed.
- Technical Proficiency: Exhibits strong skills in programming, use of relevant tools and frameworks, and application of appropriate algorithms or techniques.
- Quality of Documentation: Provides clear, concise, and well-structured documentation, including code comments, reports, and presentations, to explain the methodology, results, and conclusions.
- Adherence to Guidelines: Follows the provided instructions, and a deadline of 2-3 days for the assignment, demonstrating professionalism and respect for the evaluation process.

