

**A
Seminar Report
On
Artificial Intelligence Internship on Object
Detection & PDF Analysis**

Under the company “Codeclause PVT LTD”

Submitted in partial fulfilment of the requirement for the award of

**BACHELOR OF TECHNOLOGY
in
COMPUTER SCIENCE & ENGINEERING**

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GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR, INDIA**

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INTERNSHIP COMPLETION CERTIFICATE



Certificate of Internship

Isha Pandey

has successfully completed the internship as a Artificial Intelligence Intern
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from 15 May 2024 to 28 June 2024

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Aug 01, 2024
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Introduction

1.1 Background

Artificial Intelligence (AI) has become a cornerstone in the transformation of various industries by automating complex processes, improving accuracy, and enabling data-driven decision-making. Two domains where AI has shown significant promise are manufacturing and human resources.

In the manufacturing sector, the efficiency of assembly lines is critical to productivity and quality assurance. A common issue in assembly lines is the occurrence of missing parts during the production process, which can lead to defective products, operational delays, and financial losses. Traditionally, the detection of such anomalies has relied on manual inspections, which are often inefficient and error-prone. AI offers a powerful alternative by enabling automated, real-time detection of missing parts through advanced computer vision techniques.

On the other hand, in the field of human resources, the recruitment process often involves the evaluation of numerous Curriculum Vitae (CV) documents. This task is not only time-consuming but also subjective, as it depends on the judgment of human recruiters. AI, particularly Natural Language Processing (NLP), can be employed to analyze CVs systematically, extracting key information and providing insights into a candidate's behavioural traits and competencies. This can lead to more objective and efficient hiring decisions.

This project report presents the development and implementation of two distinct AI-driven systems: one for **Factory Assembly Line Missing Part Detection** and the other for **Behaviour Analysis from Curriculum Vitae Documents**. These systems exemplify the versatility and impact of AI in addressing challenges across different industries.

1.2 Objectives

- **Factory Assembly Line Missing Part Detection:** Develop an AI-based system to detect missing parts on a factory assembly line using computer vision techniques. The goal is to automate the inspection process, ensuring high-quality production with minimal human intervention.
- **Behaviour Analysis from Curriculum Vitae Documents:** Create an AI system that utilizes NLP to analyze CVs and extract behavioural traits and skills relevant to specific