

Posture Making Competition Report

Nirma University recently hosted an enthralling Posture Making Competition that brought together talented students from various colleges, including our representation from L.D College of Engineering in Instrumentation and control. The competition was a vibrant display of creativity and skill, with participants showcasing their unique postures and artistic flair.

Competition Highlights:

Hosted by: Nirma University

Event: Posture Making Competition

Organized by: ISA club (Gujarat chapter)

Participants: Students from diverse colleges and branches

Date: 10/8/2024

Representation and Victory:

Our team, representing the L.D College of Engineering in Instrumentation & Control branch, stood out among the competitors with a captivating posture that captured the essence of the theme. Through meticulous planning and teamwork, we presented a winning performance that impressed the judges and audience alike.

Triumph as First Prize Winners:

Amidst tough competition, our team emerged victorious, clinching the coveted first prize. The elation and pride of our victory reverberated through the venue as we were honored for our exceptional creativity and execution.

Celebration of Success:

The day unfolded beautifully as we celebrated our triumph with joy and jubilation. Our victory symbolized not just individual achievement but also the collective effort and teamwork that propelled us to success. The camaraderie and spirit of unity among our team members made the celebration even more memorable.

Recognition and Appreciation:

As first prize winners, we were recognized for our talent and dedication, receiving accolades and applause from the audience. Our victory showcased the prowess of L.D College of Engineering and the excellence of our branch, setting a high standard for artistic expression and creativity.

Memorable Day:

The entire day was a testament to the power of creativity, teamwork, and perseverance. Our representation at the Posture Making Competition not only highlighted our individual skills but also underscored the spirit of collaboration and unity that defines our college and branch.

Conclusion:

The Posture Making Competition at Nirma University was not just a platform for artistic expression but a day of triumph, celebration, and camaraderie. Our victory as first prize winners reflected our commitment to excellence and the collective strength of our team. The memories created on this day will forever hold a special place in our hearts, symbolizing a journey of hard work, creativity, and success.

Theme: AI in Industrial Automation
REAL-TIME INDUSTRIAL PROBLEM DETECTION USING MACHINE LEARNING

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PROBLEM STATEMENT

In bearing manufacturing, **Face Vendor Error** is a common defect that arises during the grinding of the face and outer diameter (OD) of bearing rings. This error is often linked to variations in material properties like carbon content.

With advancements in technology, Artificial Intelligence (AI) has emerged as a powerful tool for automating the detection of Face Vendor Errors.

ML & OPENCV

CNN (Convolutional Neural Network) is like the brain of AI for understanding images and videos, helping computers recognize objects in pictures and movies just like we do.

OpenCV is a versatile computer vision library used for tasks like image processing, object detection, and machine learning applications, making it a valuable tool for developers and researchers.

OUTPUT IMAGES

ECONOMICS

- 2 people per shift are hired for this work
- Total 3 shifts = Total 6 persons in 1 plant
- The salary of 1 person is around 15,000 per month
- Total expense = **90,000 per month**
- Annual Expense = **10,80,000 per year**
- This is for only 1 process in one plant
- There are a total 5 plants in India with more than 20-25 processes which cost around 2,16,00,000 annually

ADVANTAGES

- Quality Assurance
- Reduce Men Power
- Reduction in Cost
- Higher Efficiency

