Group 5: Workers Supervision for Construction Safety (PHAM Trung Kien, DO Van Quyet)

a. Summary of the report

The construction industry has never been less worth attention with the number of buildings, infrastructures, skyscrapers... significantly growing every year. However, the number of workers injured or even died in tragic accidents happened in construction sites is also increasing excessively, making the need to enhance construction safety hotter and hotter.

In view of this, Group 5 attempts to overcome those drawbacks, Group 5's project focused on building an AI monitor to manage fisheye frames retrieved from onsite 360° overhead cameras, adopting State-of-the-art (SOTA) Object Detection and Image Classification models.

b. Describe the strengths of the report

Group 5 proposed a method that leverages new technology to utilize fish-eye images from 360 over-head cameras. The objective was clearly illustrated. Using the multi-person detector and binary image classifiers, they aim to deliver instant reminders for construction workers. Overall, the flow of the project, from dataset analysis, model selection to results and conclusion, are comprehensively explained to the audience.

c. Describe the weaknesses of the report

Some room for improvement in the format of presentation. The audience may not be able to understand the complex concepts or models without clearer explanation from the presenter. Also, there is extensive description on the methodology and model used during the presentation and in the report. More elaboration on the raw data is expected

- d. Evaluation on quality of writing (1-5): 4, a few grammatical mistakes/ type. Overall the report is a good piece of writing.
- e. Evaluation on presentation (1-5): 5, well-organized presentation and the flow is very good.
- f. Evaluation on creativity (1-5): 5, this self-proposed topic is interesting and innovative. Group 5 has done a great job in presenting solution to a real-life problem using machine learning algorithms.
- g. Confidence on your assessment (1-3): 3