

System for detecting workers not wearing safety helmets on construction sites.

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Abstract: This topic focuses on developing an automated system to detect workers not wearing safety helmets at construction sites. The practical context shows that this issue can pose significant risks to workers' health and occupational safety. The objective of the research is to design and implement an image analysis-based system to mitigate this risk. The method used combines machine learning theory and experimentation to create an effective solution for monitoring and alerting about occupational safety conditions. The expected outcome is enhanced construction site performance through improved safety management processes.

Keywords: Detection system, Safety helmet, Construction site, Machine learning, Occupational safety