



Augmented Reality for the Quarry of the Future and Operator 4.0

The aggregates industry is a key industry for the development of the global society. However, it is also a large contributor to global emissions. It needs to improve in different aspects to meet the net zero requirements by 2045.

The industry is gradually being digitalized in order to improve efficiency and reduce waste. One aspect of this is to ensure that the relevant information from the process is given to the operator in the right format and at the right time to improve decision making.

Augmented Reality (AR) is defined as a possible ICT-based support tool for human operators. With AR, virtual information is combined with the real world in real-time.

The aim of this project is to create and evaluate AR applications together with an engineering support team and operators in a quarry close to Gothenburg. The developed applications need to enable the operator to view, operate and maintain the process through the current cloud system. The applications will be developed on available Vuzix AR glasses. The project includes both academic and industrial relevance.

Literature recommendation:

Damiani, L., Demartini, M., Guizzi, G., Revetria, R., and Tonelli, F., (2018) "Augmented and virtual reality application in industrial system: A quantitative review towards the industry 4.0" IFAC-PapersOnLine.

Segovia, D., Mendoza, M., Mendoza, E., and Gonzalez, E., (2015) " Augmented Reality as a Tool for Production and Quality Monitoring" Procedia Computer Science.

Målgrupp

t.ex. M, E, Z, I, TD

Grupstorlek

Mellan 3 och 6

Speciella förkunskaper

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Kan det dubleras?

Ja