

Augmented Reality supported Bridge-Inspections

Setting:

Bridge inspections can make a big use of 3D-BIM models on site if these models can be taken with the investigator.

AR glasses or MR devices represent promising techniques since model data can be visualized "on top" of the real world during the inspection.

Damages known from previous inspections or sematic data or checkforms can be visualized as well

Your Tasks:

Create an AR application using MS Hololens 2 that

- can show (parts of) a bridge-model containing known damages in the free environment "on top" of the real bridge.
- can visualize and hide semantic information about bridge parts and damages
- can lead the user from damage to damage in order to provide a "guided inspection"

Project Characteristics

Modeling: ★★☆☆
Mathematics: ★☆☆☆
Programming: ★★★★
Science: ★★☆☆



Source: Construction Manager Magazine: Skanska early UK adopter of new BIM AR system