

ARcheoBox Engaging with Historical Artefacts Through Augmented Reality and Tangible Interactions

Overview

ARcheoBox is a novel interface that lets users physically pick up a digitized version of a real artefact and inspect it closely from all angles through a screen. The system combines augmented reality and tangible interactions to remove barriers between visitors and artefacts.

User Study

We tested ARcheoBox with eight archaeological experts at Northumberland National Park. The initial feedback indicated that the ARcheoBox has great potential as an innovative interpretive tool for the collection of 3D scanned Bronze Age artefacts. Reactions from the users included:

“The prototype produced a very realistic representation of these artefacts and enhanced the experience of studying historical artefacts.”

– Archaeological Expert –

- A walk-up and use experience for Cultural Heritage
- Off-The-Shelf Technology
- Multi-User Experience

Future Work

ARcheoBox successfully allowed users to engage with the digitized models using augmented reality. Consequently, we expanded our first prototype by using a 3D printed replica as a marker. Users can pick the 3D printed object in their hands as if it is the real artefact. A user study will be conducted to evaluate the impact of using a flat marker versus a 3D printed replica on user experience.

