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Computers and rock art

Linking the ancient and new.

State-of-the-art computer software technology and Aboriginal rock art from thousands of years ago would seem to have little in common.

But they have come together in a research project in La Trobe University's Department of Computer Science and Computer Engineering. The project will record and catalogue rock paintings near Laura on Cape York Peninsula and enhance the tourist potential of the area.

Six teams of La Trobe University final year software engineering students developed the prototype software last year in collaboration with James Cook University and Motile Pty Ltd, a firm of IT consultants and developers.

Known as the Quinkan Culture Matchbox, the software will assist sound cultural heritage management of rock art sites and other Aboriginal cultural places on Cape York using a cutting-edge cultural heritage content management system.

Matchbox is a state-of-the-art Web-based resource cataloguing system that can be used for archiving digital and physical resources of all kinds, including video, audio and print materials.

La Trobe and Motile will develop software for the computer cataloguing, while James Cook University will conduct the archaeological aspects, determining ways to capture and manage descriptions of the rock art and other sites.

La Trobe Head of Computer Science and Computer Engineering, Professor Tharam Dillon, says the University's Software Engineering Project has already led to the commercialisation of a number of other computer engineering initiatives since it was launched in 2000.

Material for the project will be catalogued in consultation with Elders of the community responsible for the rock art of the Quinkan Reserves on Cape York. This will form the content of the Matchbox computer resource description system.

'Time is short,' says Professor Eric Wainwright, project leader from James Cook, because the Aboriginal guardians of the sites are aging and they are anxious that the oral traditions linked to each painting be recorded and passed down to coming generations.'

Ms Liddy Nevile, researcher and project manager from Motile and James Cook says: 'The stories, rock paintings and images of them, and information about them, need to be carefully catalogued so they can be "repatriated" to those responsible for the rock art'.

La Trobe lecturer, Mr Torab Torabi supervised teams of students from several disciplines, including computer science and engineering and business, that developed the prototype software.

Two students, Sarah Pulis and Behzad Kateli, who helped develop the prototype, and Sophie Lissonnet from James Cook University, are now employed as postgraduate researchers on the second phase of the project.
Other people involved are Professor Dillon and Dr Wenny Rahayu from La Trobe and Mr Andrew Donald and Mr Robert Donald from Motile. The project has received a Strategic Partnerships with Industry - Research and Training Scheme (SPIRT) grant of $270,000.