

3D Objects in Wat Makutkasattriyaram's e-Museum: Progress, Experiences, and Applied Technologies

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Wat Makutkasattriyaram is a temple founded in 1868 in Bangkok, Thailand. Aside from its religious functions, this temple stores numerous murals of fine arts and crafts related to the royal family and some historical events. The temple's e-Museum development project began in July 2005 to celebrate the 50th birthday of HRH Princess Maha Chakri Sirindhorn. The project objectives include preservation, management and publicity about Thai cultural heritage knowledge for the general public and for younger generations who mainly use the Internet to find information. Another aim of the project is to gain knowledge related to 3D object creation and visualization via the web. This presentation will describe the current state of the project one year after its development. It will also discuss field experiences in 3D object creation processes and all applied technologies including digital photography, virtual reality, photographic VR, 3D laser scanner, metadata and database management systems and web-based applications development. The eMuseum is developed with web-based and database concepts via LAMP (linux, apache, mysql, php) and many items have been digitized as 3D objects. The presentation will cover problems related to the large storage size of objects and solutions to these problems.