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Suitable uses of Augmented Reality as a  
Tour Assistance Tool

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## **Abstract**

Over the past few years, the world has witnessed the novelty and advancement of Augmented Reality. There is a usage of Augmented Reality is social media for filters, gaming applications and modelling applications. The usage of augmented reality is barely used in other industries. In the tourism industry Augmented reality can be used in various ways, currently there are navigation and information applications which are available however this information can be retrieved through the internet using search engines and other standard applications available. In some countries there is research and conceptualisation for augmented reality applications that remodels the existing environment to how it would have been in the past. There has been a positive feedback on such concepts. Therefore, this project explores augmented reality applications in Sri Lanka related to tourism and produces a concept and implementation that recognises the existing environment and location, augments the environment, providing a tour narration and finally, suggestions of tour sites that are nearby and transportation modes and rates are given. Further the information provided are customised to provide a more personal experience.

As evidence shows that augmented reality boosts user experience and attracts users, this project will investigate how augmented reality can be used in the tourism industry in Sri Lanka. This report provides the design and development of a system which allows tourists to visit Sri Lanka with a virtual tour assistance tool. AR Foundation and Unity are used to augment the environment and for image recognition. Compared to existing systems, this system provides customised information from a tour guide as one would narrate in an actual visitation and customised 3D objects to suit the location. This dissertation contains the entire process followed from initiation to evaluation of an Augmented Reality Tour Assistance Tool.

**Keywords:** Augmented Reality, Tourism, Image Recognition