

Summary 1:

An augmented reality application for smart campus urbanization: MSKU campus prototype

The study aims to adapt smart city features, mainly the use of AR tourism technologies, to allow visitors to familiarize themselves to a university campus. The user opens application on a mobile device. If they want more information, they will take an image of the location. Key points are detected in the photo and compared with images stored in the webserver database to identify the buildings (facilities). GPS data is used to calculate the distance of the buildings and the current location. Icons for each building, including name and location are created on top of the building in the image and presented on the mobile application. Tapping the icon will show more information and tweets about the building. Information of campus events and emergency data will also be provided. A 360 view of the area within 100 m is given by radar feature, which shows the current direction and points of interest in the form of red dots, updating based on user movement using GPS. A basic prototype was developed in this study. Future work includes enrich the application content so it can be more relevant and useful for the users. The team aim to apply this technology to other campus and cities in Turkey.

BibTeX:

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abstract={Augmented Reality applications are used in almost every area of our lives.  
These applications have been started to use in the town planning and smart city  
applications. In this study, a prototype application was developed using this  
technology. As a smart city/smart campus application, Mugla Sitki Kogman  
University Campus application will be made. The aim of this study is to adapt some  
of the smart city features to a campus. In addition, this study is an attempt to  
generate a visual aid for the smart campus concept. An augmented reality prototype  
is developed for the MSKU campus. Image detection methods are used to detect the  
places. External data sources including Twitter data will be used to get information  
about the detected places and presented on the screen. Methods, design, and  
findings are discussed.},  
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