

Using neural networks for mobile applications: self-driving tourism

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Abstract

At present, tourism and hospitality industries extensively makes use of Information Technology (IT) with the objective of reducing costs, improving operational competence as well as improving the quality of service provided to customers, in order to render a better service for the clients. Thus a new dimension was merged to tourism with the adoption of IT in tourism related services. From e-Marketing to virtual tours applications of IT in tourism are diverse. A recent trend in IT-based tourism can be identified as deploying mobile apps as a part of tourism and capturing user data, to update the services to cope with user demands continuously. Sri Lanka as a developing country has limited street view and tourism cornerstones are highlighted in the Internet. This makes potential users to visit a plethora of websites and related apps to fulfil their demands. Building a centralized app for all key tourism areas based on a variety of options ranging from landscapes to business organizations would allow users to easily navigate, while uploading their own information. This research was conducted as a survey to capture user data and to build an Android application based on the data. The system uses a neural network multi-level perceptron (MLP) with back propagation based on the Android platform as a mechanism of centralizing tourism related services in Sri Lanka.

Key Words: *Artificial Neural Network, Back propagation, Multi-level perceptron, eTourism, Android*

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