

## **Learning tool on data structures and algorithms using Android**

T. Sajeetha \*

Department of Mathematics, Faculty of Science, Eastern University, Sri Lanka.

\*Corresponding author: sajeethas@esn.ac.lk

### **Abstract**

Android is now the most used mobile operating system in the world. Learning by means of mobile phones is becoming a new approach towards education, and it is unique in its own way and offers learning opportunities anywhere and anytime. An effort is made to enhance the learning opportunity and attractive learning method. The learning tool for Data structure and Algorithm, *DS Teacher*, is designed to help the learners to get a clear picture about this subject area. This *DS Teacher* includes Data structures (eg: stack, queue, etc..) with animated examples, Algorithms and C++ program code. This tool helps the students to learn in an effective way.

A study was undertaken to investigate the impact of such an environment enabled by android platform on the learning process among second year undergraduates of Eastern University, Sri Lanka. Questionnaire was given to seventy-five students to check the effectiveness of the system. Excel pie chart is used to analyze the effectiveness. Findings showed that the respondents were very receptive to the interactivity, accessibility, and convenience of the system. Overall, the mobile learning system *DS Teacher* can be utilized as an inexpensive tool but complements undergraduates' learning process.

**Keywords:** Android, mobile application, DS Teacher