Critical Analysis on Algorithm Visualization Study

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 150
Number 11

Year of Publication: 2016

Authors:
Ahmad Affandi Supli, Norshuhada Shiratuddin, Syamsul Bahrain Zaibon

10.5120/ijca2016911633

Abstract

This paper reports on an ongoing study, which intends to propose a principle of interactive algorithm visualization on hybrid mobile application (INAVOHMA) that is created in order to help IT students learn data structure and algorithm (DSA) subject. Totally, 8 existing AV guidelines and models were reviewed comprehensively with the main purposes (1) to determine the research gaps in proposing principles of INAVOHMA and (ii) to identify their common components. Through a systematic and critical analysis, this study discovers there is still lack of inclusive principles or guidelines of AV that focused on mobile platform, mostly for desktop or website platform. Only, two guidelines draw attention to mobile platform, yet the focus of them just for sorting algorithm only. It is noted that this is the research gap that should be the focal point for further study.

References


3. Sadikan, Siti Fairuz Nurr, & Yassin, Siti Fatimah Md. (2012). Role of Interactive Computer Programming Courseware in Facilitating Teaching and Learning Process Based on Perception of Students in Bangi, Selangor, Malaysia. Learning, 3, 0.51.


5. del Vado Vírseda, Rafael. (2010). A visualization tool for tutoring the interactive learning of data structures and algorithmic schemes. NOTE FROM ACM: It has been determined that the author of this article plagiarized the contents from a previously published paper. Therefore ACM has shut off access to this paper. Paper presented at the Proceedings of the 41st ACM technical symposium on Computer science education.


**Index Terms**

Computer Science  
Algorithms

**Keywords**

Algorithm Visualization, Critical Analysis, Finding Gaps, Paper Submission.