## **ABSTRACT**

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Title : DoCare Social Application Based on Android with

Knuth-Morris-Pratt Algorithm

Mobile phones are no longer a luxury item, even this technology has become a necessity for every individual in this technological era. Even the sophisticated version of this technology, commonly called a smart phone, has helped or facilitated work, seeking information, even socializing. This study aims to make it easier for users to find social care foundations around the Jakarta and Bekasi areas. By using Firebase as a real-time database, and implementing the Knuth – Morris – Pratt (KMP) algorithm to facilitate search. Knuth – Morris-Pratt (KMP) is a string matching algorithm that has a search pattern that starts from the left then moves right to match the string. In this study, the Knuth – Morris – Pratt algorithm (KMP) was successfully implemented into the application, and the system testing with the black box method showed good results, so the application could run as expected.

Key words: android, firebase, knuth-morris-pratt (KMP), string matching, social foundations

