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RESEARCH AND INNOVATION
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26. Effectiveness of Covid-19 contact tracing solutions

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Abstract

COVID 19 has become a global pandemic requiring public health officials to take many measures to contain its spread. Amongst the measures is tracing those who have been in contact with infected people i.e. contact tracing. This paper examines some digital contact tracing applications that were developed soon after the outbreak (in the year 2020) and how effective they have been. The paper highlights a study done on these applications which shows that there are some issues around the use of the applications which hinders their wider adoption by the public (adoption of these applications by the public is one of the surest ways of containing the spread of the pandemic). The paper goes on to examine an instance where one of the issues raised (security of Personally Identifiable Information, PII) is addressed in a proposed design solution. The paper concludes by suggesting what should be done by contact tracing application developers to ensure their products are more acceptable to consumers thereby leading to their wider adoption.

Keywords: *COVID-19, Contact tracing, Proximity estimation, Contact-tracing apps, App adoption, Contact tracing incentives*