AI-Based Child Care Parental Control System

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Abstract

Due to the prevalence of the COVID-19 epidemic around the globe, children were compelled to engage in remote learning through online platforms, hence mobile phone has become one of their predominant devices. Mobile device with Internet access offers a major outlet for education, entertainment, and social connection, but this combination can lead to several significant bad sequences such as online exploitation, harmful addictions, and other negative impacts of online social networking. To address harmful effects, parental controls are becoming more crucial, yet Sri Lankan parents are less aware of this. Consequently, this study proposes a parental control system to monitor their child's activities. Android, Microsoft Azure, Java, Python, OpenCV, MySQL, and FastAPI are among the most prominent technologies utilized in the proposed application's development. The suggested approach focuses primarily on the Sri Lankan context and aims to enhance parental digital literacy while safeguarding children from cyber threats. Yielded results showed the proposed mobile application for the identification of toxic words, drugs & alcohol content, game character images, and Instagram Sinhala comments severity as 94%, 95%, 97%, and 55% respectively in controlled experiments.

Keywords

Parental control, Mobile Application, OpenCV, Image processing, NLP

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