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Advancement of Computer Science Research in Nigeria: A Bibliometric Analysis of the Past Three Decades

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Abstract: This study aims to gather a proper perspective of the development landscape of Computer Science research in Nigeria. Therefore, a bibliometric analysis of 4,333 bibliographic records of Computer Science research in Nigeria in the last 31 years (1991-2021) was carried out. The bibliographic data were extracted from the Scopus database and analyzed using VOSviewer and the bibliometrix R package through the biblioshiny web interface. The findings of this study revealed that Computer Science research in Nigeria has a growth rate of 24.19%. The most developed and well-studied research areas in the Computer Science field in Nigeria are machine learning, data mining, and deep learning. The social structure analysis result revealed that there is a need for improved international collaborations. Sparsely established collaborations are largely influenced by geographic proximity. The funding analysis result showed that Computer Science research in Nigeria is underfunded. The findings of this study will be useful for researchers conducting Computer Science related research. Experts can gain insights into how to develop a strategic framework that will advance the field in a more impactful manner. Government agencies and policymakers can also utilize the outcome of this research to develop strategies for improved funding for Computer Science research.

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