A Quantitative and Comparative Evaluation of Key Points Selection Algorithms for Mobile Network Data Sets Analysis

In recent years, network operators are receiving an outsize amount of data due to the increasing number of mobile network subscribers, network services and device signalling. This trend increases with the deployment of 5G that will provide advanced connectivity to wireless devices and develop new services. Network analytics must allow telecommunications operators to improve their services and the infrastructure extracting useful information from large amounts of data. A methodology based on orthogonal projections was developed in order to analyze the network information and facilitate the management and the operations to network providers. In the current study, different key points selection algorithms are investigated in order to make a quantitative and qualitative evaluation and analyze the performance of those algorithms which use different approaches to select these points, which will be utilized in the methodology. A novel synthetic data set has also been developed to statistically evaluate the effect of the key points selection algorithms in the clustering, as well as, measure the performance of the aforementioned methodology. Finally, these key points selection algorithms are used in a real scenario to evaluate the impact of the different approaches in the analysis.

Fuente de la publicación:

- D. Cortés-Polo, L. I. J. Gil, J. -L. González-Sánchez and J. Carmona-Murillo, "A Quantitative and Comparative Evaluation of Key Points Selection Algorithms for Mobile Network Data Sets Analysis," in IEEE Access, vol. 9, pp. 92030-92042, 2021, doi: 10.1109/ACCESS.2021.3092596. [1]

Documentos relacionados:
Noticias relacionadas: