

عنوان مقاله:

Multivariate microaggregation based on an evolutionary approach

محل انتشار:

سومین کنفرانس بین المللی محاسبات نرم (سال: 1398)

تعداد صفحات اصل مقاله: 7

نویسندگان:

;Reza Mortazavi - School of Engineering, Damghan University, Damghan, Iran

;Seyedeh Hamideh Erfani - School of Engineering, Damghan University, Damghan, Iran

خلاصه مقاله:

There exists an enormous amount of useful information gathered by statistical agencies. However, the privacy issues of involved entities limit them for public usages. Different computational privacy models are suggested to protect the privacy of individuals during data publishing such as k -anonymity. In a k -anonymous dataset, each combination of identifying attributes occurs in at least k records. Microaggregation is a successful mechanism to realize k -anonymity. However, it is proved to be NP-hard in general. This paper addressed the problem of multivariate microaggregation and introduces a compact encoding to solve it using an evolutionary approach. Experimental results confirm the superiority of the proposed method in 88% of test cases in compare with similar studies in the literature.

کلمات کلیدی:

.Statistical Disclosure Control, Privacy, Microaggregation, Evolutionary algorithms, Constraint-clustering

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1006022>

