Data Forensics with Analytics

Trust Discovery for Data Quality

Mouhamadou Lamine Ba and Laure Berti-Equille
Qatar Computing Research Institute

Data Forensics with Analytics, or DAFNA for short, is an ambitious project initiated by the Data Analytics Research Group in Qatar Computing Research Institute. It main goal is to provide effective algorithms and tools for determining the veracity of structured information and the reliability level of data sources. Being able to efficiently verify the veracity of data and sources in presence is an ubiquitous challenge in many real world scneraios, e.g., data fusion or social data analysis, in which human has a need to consume high quality information for personal or businness purposes. One final vision of the DAFNA is to build an end-to-end truth discovery systems that provides reliable information about facts in Qatar, given some extraction and integration phases. This is challenging and asks for facing diverses research topics related to efficient fact extraction, efficient truth finding strategies, and how truth finders could be coupled with real existing systems.

We will present our ongoing study on extensively comparing twelve existing truth discovery algorithms, releasing the first API that will enable user applications to transparently access to the truth finders, and finally integrating truth finding in the process of quality information retrieval based on Web extraction systems.

Roadmap of Truth Discovery Algorithms The first challenge dealt by the DAFNA project was to provide an thorough roadmap of the existing truth discovery algorithms with an extensive comparative evaluation of their performance.

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