

# **Data Forensics with Analytics**

## **Trust Discovery for Quality Data**

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. Its main goal is to provide an end-to-end pipeline data integration and analysis system whose core will be an efficient and effective truth discovery approach in order to have the ability to figure out the veracity level of redundant information from multiple untrustworthy sources they consume. One concrete targeted application of this project is to build an end-to-end truth discovery system that provides reliable information about facts in Qatar, given some extraction and integration phases. This is challenging and asks for facing diverse 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**

### **RestFul API for User Applications**

### **Real World Applications**