Call for Contributions for Submission: 1. Inform the Chair: with the Title of your Contribution 2. Submission URL: <u>https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=DATA+ANALYTICS+2018+Special</u> Please select Track Preference as BADA

Special track

BADA: Blockchain Applications Data Analytics

Chair and Organizer

Research Affiliate, Damiano Di Francesco Maesa, Istituto di Informatica e Telematica, Consiglio Nazionale delle Ricerche, Pisa, Italy d.difrancesco@for.unipi.it

along with

DATA ANALYTICS 2018, The Seventh International Conference on Data Analytics <u>http://www.iaria.org/conferences2018/DATAANALYTICS18.html</u> November 18 - 22, 2018 - Athens, Greece

The recent interest surge for blockchain applications has lead to countless new proposals in many fields of application. The property of traceability of a blockchain is achieved by saving the entire history of the system, expressed as an ordered list of state updates, in a publicly visible repository (in a permissionless scenario). This data is available for public inspection by design, to allow users to validate new state updates. Such huge amount of data is open for data analytics applications to obtain useful insight on the underlying ecosystem.

The first application of blockchain technology has historically been cryptocurrencies. In such an application field the data stored on the chain has a very precise meaning, as the chain is used as a distributed ledger to keep track of each entity funds. Despite the many new applications proposed public cryptocurrency blockchains, such as Bitcoin and Ethereum, still detain the highest popularity among users, that often build their own distributed applications (Dapps) on top of them. Data analytics studies in such a field can yield novel non trivial results on how cryptocurrency are used.

Usually, blockchain privacy protection measures are limited to the Bitcoin protocol proposal: relying on pseudonymity. This means that users can mask themselves behind many unconnected entities (neither connected between them, nor to the user). Some attacks have been proposed in the literature to show possible techniques to attempt to break the pseudonymity property, mostly applied to the Bitcoin protocol. Goal of such attacks is to obtain a users graph providing a representation closer to reality than the simple transaction graph obtained directly from the unprocessed blockchain data. Data analytics tool can benefit this research field by giving insight and validity estimation, while such attacks can in turn strengthen data analysis by providing a cleaner data set to start with.

The topics of interest include, but are not limited to:

- Blockchain data analysis
- Blockchain and big data
- Cryptocurrencies data analytics
- Cryptocurrencies trend prediction and correlation analysis
- Cryptocurrencies deanonymization attacks and data analytics
- Cryptocurrencies transaction graph and users graph analysis
- Non cryptocurrency blockchains data analytics
- Smart contracts data analytics

Important Datelines

Inform the Chair: As soon as you decided to contribute Submission; August 1 October 5 Notification: September 1 October 20 Registration: September 15 October 30 Camera-ready: September 25 October 30 Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

- See: <u>http://www.iaria.org/format.html</u> [both LaTex and .doc templates]
- Before submission, please check and comply with the editorial rules: <u>http://www.iaria.org/editorialrules.html</u>
- More information on camera ready preparations will be posted after the paper notifications are sent out.

Publications

- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
- Print proceedings will be available via Curran Associates, Inc.: http://www.proceedings.com/9769.html
- Articles will be archived in the free access ThinkMind Digital Library: http://www.thinkmind.org

Paper Submission

https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=DATA+ANALYTICS+2018+Special Please select Track Preference as BADA

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.

- Registration fees are available at http://www.iaria.org/registration.html

Contacts

Damiano Di Francesco Maesa: <u>d.difrancesco@for.unipi.it</u> DATA ANALYTICS Logistics: <u>steve@iaria.org</u>
