



smART social media eCOsytstem in a blockchaiN Federated environment

*A novel set of trustworthy,
resilient, and globally sustainable
decentralised social media services*

ARTICONF addresses issues of **trust**, **time-criticality** and **democratisation** for a new generation of federated infrastructure, to fulfil the privacy, robustness, and autonomy related promises that proprietary social media platforms have failed to deliver so far.

The project gathers a team of multidisciplinary cross-sectorial stakeholders, involved both as consortium as well as interest group partners.

OBJECTIVES

Transparent, decentralised infrastructure

Simplify creation, integration and federation of agile decentralised social media platforms by creating a novel permissioned blockchain with anonymised identities.

Improved and trusted participation

Ensure verifiable and traceable content ownership, while preserving creator anonymity and maintain content traceability and ownership activity across the network.

Democratic and tokenized decision-making

Research graph anonymisation techniques to power cooperative applications and improve participatory exchanges in anonymised ecosystems.

Elastic resource provisioning

Improving efficiency and controlling distributed P2P and Cloud virtual infrastructures, optimising QoS performance metrics and ensuring fast recovery.

Cognitive analytics for collaborative economy

Socially-aware and spatial-temporal data aggregation, knowledge extraction, guided analytics, cognitive learning and risk quantification for a collaborative economy.

Project title: ARTICONF

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Duration: 36 Months: January 2019 – December 2021

EU Horizon2020 - ICT-28-2018 – Future Hyper-connected Sociality - Research and Innovation action

Total Cost: € 4,166,879

Latest updates: www.twitter.com/articonf

Project Website: www.articonf.eu

USE CASES

Crowd journalism

Challenges: validate crowdsourced news, find precise and trustworthy crowd-participants and provision time-critical infrastructure resources closer to news location for faster access to breaking news.

Car sharing

Challenges: low public awareness of shared mobility and issues relating to precise planning, optimising business costs, person-to-person lending and collaborative consumption.

Video reviews

Challenges: Contextualised and thematic search of audio-visual metadata in a large video library, and the security and privacy of a scalable business model that rewards users for their interactions.

Smart energy

Challenges: identify the behavioural convergence of the prosumer decisions over a specific smart appliance, and lack of efficient data management to keep track of the amount of energy produced by users.

AMBITION

ARTICONF presents a radically new perspective in the current age of centralised social media controlled by single authorities, by creating an open, transparent and agile ecosystem supported by an underlying blockchain technology. This enables decentralised ownership, where anonymised users validate the ownership of their content, and collaborative democratic decision-making by reaching decentralised consensus instead of relying on centralised authoritarian third parties. This simplifies traceability to identify bad actors and eliminates malicious contents such as fake news, listed in the action plan to combat fake news and disinformation online on. ARTICONF makes use of modern Cloud edge computing technologies to adaptively provision computing and Big Data storage resources in close proximity to the social media traffic to ensure a good time-critical QoS to all participants. Through its novel socio-cognitive and smart matching with precise targeting using graph anonymization techniques integrated into a P2P orchestrated networked infrastructure, ARTICONF facilitates relevant community detection without de-anonymization.

IMPACT

ARTICONF delivers a trustworthy, resilient and sustainable, decentralised social media ecosystem based on a set of open source microservices empowered with blockchain technology, targeting a number of stakeholders, such as:

- Social media users showcasing creativity at a large scale using a transparent, value-centric, trustful, democratic and inclusive platform with monetization;
- Social media prosumers and businesses (e.g. influencer advertising or marketing) with trusted and intelligent analytics providing guided tour to an improved ROI;
- Creative and technological social media application developers and providers enhancing the support for collaborative participation across diversified geographical boundaries.



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