Blockchain and AI: integration for more trusted digital world. Session: « How to make AI secure and Safe? »

Abstract:

"No single technology can operate in isolation, especially Blockchain that provides immutable transaction processing and history, but requires lot of resources off-chain to deliver value. We learned from the past, that integration of technologies lead to bigger benefits than the sum of each one's benefits. This applies, in particular, to AI and Blockchain. In this presentation, we will illustrate the benefits of combining AI and Blockchain technology in multiple domains including future mobility sector. Blockchain can help AI solutions in securing data sets, the fuel of AI algorithms, and allow their sharing in a decentralized manner, with no man in the middle. Sharing scenarios and monetization rules, can be implemented with Smart Contracts, giving opportunity for data sets owners, to leverage their asset on one hand, and be able to leverage sophisticated models in Machine Learning. Blockchain can help in augmenting the traceability of data and decisions points, produced by AI solutions, and improving consequently the challenging area of AI explainability. Finally, on access management to critical data sets used for training models, Blockchain can help in the fight against adversarial attacks, through decentralized identifiers (DID – as defined by W3C) registered on Blockchain and that constitutes Layer 1 of the Trust over IP stack being defined in the ToIP foundation. On another front, AI can help Blockchain in providing off-chain compute resources needed to solve realworld inference problems."

Najah NAFFAH, CEO Blockchain Secure

The sixth edition of the European Cyber Security Challenge (ECSC) took place on September 28, 2021 in Prague. Najah NAFFAH (CEO of Blockhain Secure) hosted a presentation about AI and Blockchain during the conference « Does The Brain Stand a Chance? », organised by AFCEA Czech Chapter.