

Cognitive Ledger Project: Towards Building Personal Digital Twins Through Cognitive Blockchain

Amir Reza Asadi

Humind Labs

Tehran, Iran

<https://orcid.org/0000-0001-5440-8456>

Abstract—The Cognitive Ledger Project is an effort to develop a modular system for turning users' personal data into structured information and machine learning models based on a blockchain-based infrastructure. In this work-in-progress paper, we propose a cognitive architecture for cognitive digital twins. The suggested design embraces a cognitive blockchain (Cognitive ledger) at its core. The architecture includes several modules that turn users' activities in the digital environment into reusable knowledge objects and artificial intelligence that one day can work together to form the cognitive digital twin of users.

Keywords— *Cognitive Computing, Knowledge Management, Artificial Intelligence, Blockchain, Tokenomics*