





Advanced Artificial Intelligence Techniques for Analysis and Design of System Components Based on Trustworthy BlockChain Technology

Napredne tehnike veštačke inteligencije za analizu i dizajn sistemskih komponenti baziranih na pouzdanoj blokčejn tehnologiji Project supported by Science Fund of Republic of Serbia (2020-2022)

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Presentation outline







Project topics

Project team and structure

Activities and results









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- Basic problems in BC maintenance are security, privacy, consistency and energy efficiency;
- ► The main goal within this project is development of AI methods to be applied to BC technology.







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- Participants are mostly mathematicians practicing research in cryptology, logic, and optimization fields;
- ► The diversity of research groups enables various perspective and methods to be considered.

WEB page and Team members







www.mi.sanu.ac.rs/novi_sajt/research/projects/AI4TrustBC/index_en.php



Project structure







- ► Project consists of 4 work packages (WP):
 - WP1 Developing Knowledge Reasoning Techniques and Formal Methods;
 - WP2 Developing Metaheuristic-based Tools for BC;
 - WP3 Security/Privacy Evaluation of BC Consensus/Ledger;
 - WP4 Project Management.



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- We investigate standard and non-standard AI techniques (ML, Non-classical logics, metaheuristics, etc.);
- We are developing new, Al-based techniques for security and reliability analysis of BC technology.

Synergy between AI and BC

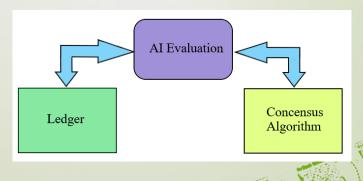






The role of AI is to ensure efficient maintaining and security management with rational energy consumption.

It requires the development of adequate methodology and that is contribution of BC to AI.

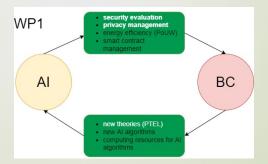


More about synergy between AI and BC







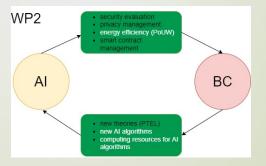


WP2 synergy between AI and BC







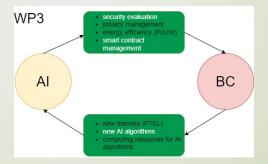


WP3 synergy between AI and BC









Activities and results







Will be presented by other team members.

