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Bachelorarbeit / Masterarbeit

Blockchain Software Engineering

Blockchain-based software systems are transitioning from small prototypes to mainstream applications. As a result, the requirements on software engineering practices for the development of the respective applications increased significantly. The aim of this thesis is to review existing literature and practice on blockchain software engineering, identify prevailing concepts and extend the current knowledge base. The scope and research method varies depending on the type of thesis (i.e. Master's or Bachelor's thesis).

Empfohlene Einstiegsliteratur:

- Porru, S., Pinna, A., Marchesi, M., & Tonelli, R. (2017, May). Blockchain-oriented software engineering: challenges and new directions. In *2017 IEEE/ACM 39th International Conference on Software Engineering Companion (ICSE-C)* (pp. 169-171). IEEE.
- Destefanis, G., Marchesi, M., Ortu, M., Tonelli, R., Bracciali, A., & Hierons, R. (2018, March). Smart contracts vulnerabilities: a call for blockchain software engineering? In *2018 International Workshop on Blockchain Oriented Software Engineering (IWBOSE)* (pp. 19-25). IEEE.
- Wessling, F., & Gruhn, V. (2018, April). Engineering Software Architectures of Blockchain-Oriented Applications. In *2018 IEEE International Conference on Software Architecture Companion (ICSA-C)* (pp. 45-46). IEEE.

Betreuer: Vincent Schlatt, M.Sc.

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