



Bachelorarbeit / Masterarbeit

Who rules SSI? Governance for decentralized identity

Self-Sovereign Identity (SSI) describes an innovative identity management concept that potentially offers benefits to both enterprises and customers. In essence, SSI describes a user-centric identity management system aiming to put users in control of their data holding and sharing. In its entirety, the concept consists of several building blocks and players including an underlying data registry, revocation registries, issuers of identities, verifiers of identities, etc.

However, not only the application of its technical building blocks is essential for a successful adoption of SSI, but also conceptual issues. Among these are governance questions. Governance is defined as “system by which the current a future use of information technology (IT) is directed and controlled.” For example, this includes defining who is authorized to issue identities. As such, governance is also referred to as a “trust framework” in the context of digital identities.

As the decentralized character of SSI poses new challenges to our understanding of existing trust frameworks, the aim of this thesis is to resolve issues of governance, decentralized identity, and SSI. The specific focus of the thesis is dependent on the type of thesis (i.e., Bachelor’s or Master’s thesis). Interesting aspects may include but are not limited to:

1. **Business rules** governing who can join the federation, membership costs, operating costs, business models, and so on.
2. **Legal rules** governing jurisdiction, membership, liability, insurance, and so on.
3. **Technical rules** governing standards, systems and protocols required for interoperability.

Empfohlene Einstiegsliteratur:

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- Mühle, A., Grüner, A., Gayvoronskaya, T., & Meinel, C. (2018). A survey on essential components of a self-sovereign identity. *Computer Science Review*, 30, 80-86.
- Davie M. et al. (2020) The Trust Over IP Stack, Github, Available at: <https://github.com/hyperledger/aries-rfcs/tree/master/concepts/0289-toip-stack>
- Preukschat, A. and Reed, D. (2020). SSI governance frameworks. In *Self-Sovereign Identity: Decentralized Digital Identity and Verifiable Credentials*. Available at: <https://livebook.manning.com/book/self-sovereign-identity/chapter-11/v-11/33>

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