Characterization of the Ethereum Workload

Ethereum is currently the largest decentralized platform and caters to multiple applications, such as finance, governance, and digital art trade. A lot of effort is being put towards improving its scalability and thus bringing the cost of applications down. Proposed solutions include parallelization of the block execution, sharding, as well as outsourcing execution to layer-2 protocols.

In this thesis, we want to look into the current and past Ethereum workload, from the perspective of applications and users. We wish to characterize the impact of different workloads on the different scalability options, improving our understanding of the influence of the workload on scaleability.

Requirements: An interest and experience in the blockchain area is a plus. We will have weekly meetings to discuss open questions and determine the next steps.

Interested? Please contact us for more details!

Contact

- Quentin Kniep: qkniep@ethz.ch, ETZ G95
- Lioba Heimbach: hlioba@ethz.ch, ETZ G95
- Yann Vonlanthen: yvonlanthen@ethz.ch, ETZ G97