A Blockchain Computer

Rasmus Erik Voel Jensen

2017

Abstract

We propose a design for a new decentralised trustless computer. By storing the machine state in the blockchain, it is possible to securely run distributed computations, without trusting the individual nodes. Individual nodes only need to know/store the small subset of the blockchain that they need for their computation.

Outline:

- Introduction
 - Motivation
 - Related work
- Architecture
 - State
 - Computation
 - Scheduling of computation
 - General tasks
- Future work
 - Actual implementation (in progress)
 - Stakes in addition to proof of work for better security