IoT and Blockchain

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Outline

Global interpreter lock

Atomicity in languages and networks

The value of distributed consensus

GIL: Global Interpreter Lock

Only one thread executes in Python bytecodes

We can run many processes at once in Python3

Processes are more heavyweight than threads.

More work is required to share information between processes, etc.

Each process has its own namespace, each process is handled directly by the operating system, etc.

GIL

JavaScript

Ruby

Python

Atomicity?
   Java, C++

Threads, coroutines, promises (tasks)

GIL makes threads not so interesting

 No cores taken advantage of

Coroutines

 Taking turns

Promises (Tasks Python)

 Continue – wait until OS alerts you

The value of distributed consensus

Is GIL the only way?

Blockchains!

Thank You!

Your helping make this a success is much appreciated !