### **Summary**

ChainFaaS proposes a serverless computing platform built on blockchain technology. It aims to provide secure, decentralized, and scalable serverless functions by using the untapped computational power of personal computers.

### Extensive Outline

The paper addresses the limitations of traditional serverless platforms, particularly concerns around centralization, security, and trust.

The motivation of ChainFaaS is not only to to use the computational capacity of personal computers but also to improve the developers’ experience of internet computing services by reducing their costs and, providing transparency and reliability. ChainFaaS aims to decentralize the market of serverless computing which is currently controlled by cloud giants, such as Amazon, Google, and Microsoft.

The paper is starts on the basis of the assumption that personal computers are highly underutilized. In the paper, enough data is provided to back that assumption.

Another assumption is that current serverless platforms are prone to issues like vendor lock-in, single points of failure, and lack of transparency.

The paper argues that ChainFaaS offers greater security and trust compared to traditional serverless platforms by eliminating the existence of a central authority.

In serverless, the developer can focus on designing and implementing the application instead of spending time on the management, operation, and maintenance of the infrastructure. Autoscaling, smart contract (customization of the contract between the

entities in the blockchain) and public resource computing are major features of serverless.

The experiments about processing time, completion time, provisioning time and response time tell a lot about potential threats to the validity of the design implementation and that sometimes, it can take quite some time to complete a task.

Hyperledger Fabric is the blockchain used. Participants are identifiable,

the transaction throughput is high, transaction confirmation is quick, smart contracts are supported, and all network details are highly configurable.

**Limitations**

The validation of the assumption about the underutilization of personal computers seems out-dated. Getting a mass crowd in a decentralized environment is challenging.

The integration of blockchain technology into a serverless platform introduces additional complexity for developers and users.

**My Opinion**

The ideas presented in ChainFaaS are innovative and align well with the current trends in decentralization and blockchain technology. The paper introduces a compelling solution to the limitations of traditional serverless platforms, particularly concerning security and trust.