Hello, my name is Astakhov Sergey. I'm going to tell you about Non-fungible tokens in blockchain. I think my topic is very actual, because nowadays NFT become more and more popular, but only few people have an understanding of NFT. NFT is a quite new technology that developed in blockchain networks and allows the exchange unique digital items(assets). NFT is widely developed in Ethereum, because Ethereum provides very suitable infrastructure for writing your own blockchain scripts, called smart contracts.

Smart contract is a simple short program written in high-level language that can be executed in the Ethereum network. Every smart contract has its own address as a regular Ethereum network user. The main idea and feature of the contract is that it can transfer tokens (money) between the users and also store tokens on it's own address. And everyone can create his own smart contract and publish it. All smart contracts are open source to avoid fraud and detect security vulnerabilities in early stages.

The most popular standard of tokens is ERC-20. It describes fungible tokens, information about the amount of tokens of each user is stored into smart contract and smart contract allows to exchange tokens like usual money. In a few years after the appearance of ERC-20 appeared another standart - ERC-721. It describes a non-fungible token, which means that every token is unique and has it's identificator, connected with the owner. So these tokens can be exchanged as usual money, but you can transfer ownership to another person, so it's like selling a picture from auction.

The most popular application of ERC-721 tokens is collecting digital art and in-game items. Token itself usually keeps only some short numeric value, connected with more complex objects, for example it can keep a hash of the digital picture. It is enough to confirm ownership of the picture and there is no need to store the picture in the Ethereum network and waste space, the picture can be stored on cloud storage, for example, or even on a hard drive.

And now some examples of using NFT.

- CryptoKitties - a game (DApp) that stores properties of virtual pets in ERC-721 token and webapp of the game generates picture of kittie using provided data. (And here you can see "Dragon" - the most expensive cat)
- 5000.0 ETH Cover - an analogue of bank insurance for cryptocurrency transfer to the list of smart contracts
- Cryptopunks - collection of punk-styled pixel avatars
- Russian artist Pokras Lampas sold paragraph of his manifest on Binance Coin network as NFT.

I hope my presentation was interesting. Now we have time for a few questions.