

# NFTs

Dylan Baynes  
Braith Anderson





# The Paper

## **Non-Fungible Token (NFT): Overview, Evaluation, Opportunities and Challenges** (Tech Report<sup>V2</sup>)

Qin Wang<sup>\*2,4</sup>, Rujia Li<sup>\*1,3</sup>, Qi Wang<sup>1</sup>, Shiping Chen<sup>4</sup>

<sup>1</sup> Southern University of Science and Technology

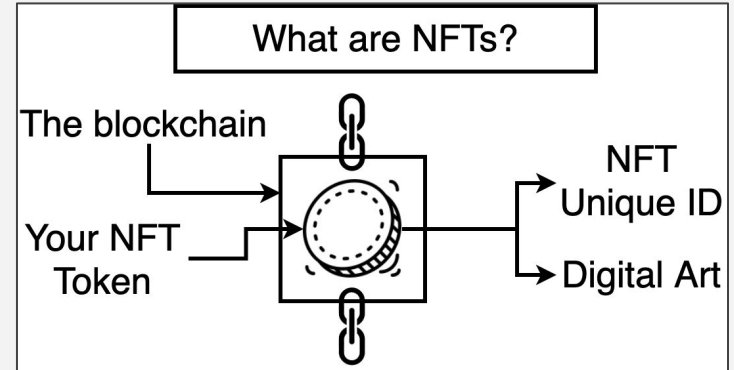
<sup>2</sup> Swinburne University of Technology

<sup>3</sup> University of Birmingham

<sup>4</sup> CSIRO Data61

# What are NFTs?

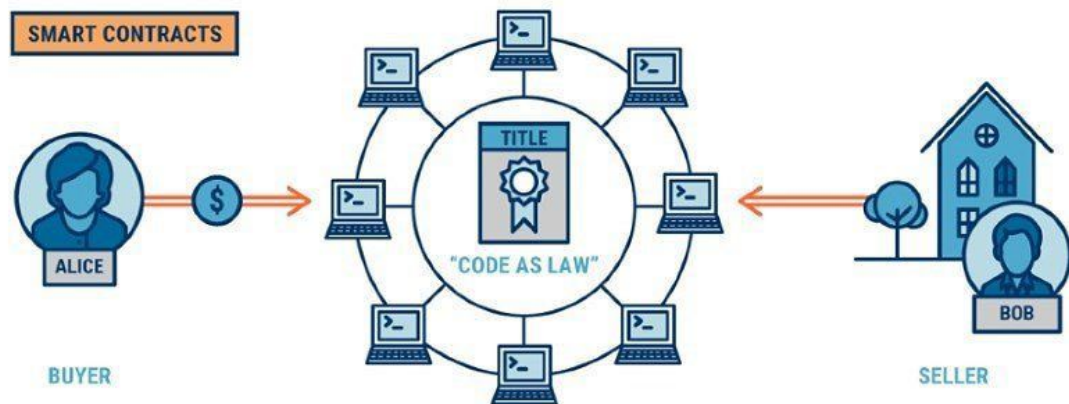
- Form of cryptocurrency, stored on a blockchain
- Operates on Ethereum Blockchain through the smart contract system
- “Non-fungible” token, all tokens are unique
- Proves ownership of anything able to be placed on the smart contract blockchain
  - Images
  - Videos
  - Tickets
- Similar to standard crypto, fees are paid for distribution and verification on the chain





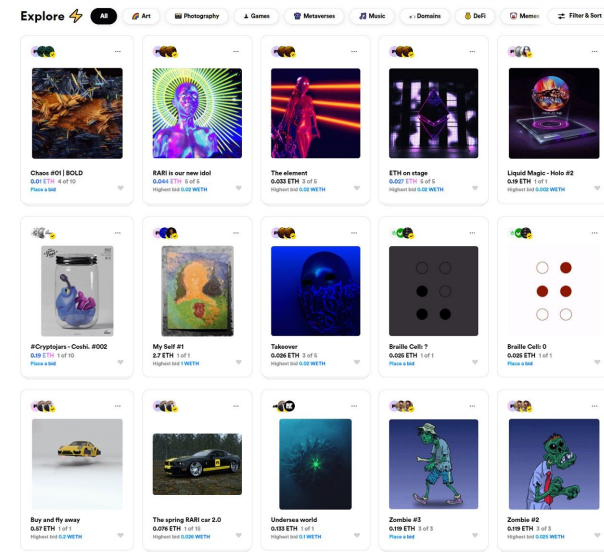
## Smart Contracts

- Built on the Ethereum platform
- Allow code to be executed during consensus
- Uses state transition replication
- Removes the need for middle men in exchanges
- Fully transparent



# NFT markets

- Opensea is a big market for digital art
- Opensea runs a sidechain to lower costs of transactions
- Allows easy way for people to trade tokens
- Generates value of NFTs
- Market cap is at least 6.5 trillion AUD
- For selling digital art, collectibles, etc
- Only new, much more to come
  - Examples in event tickets



**OpenSea**

The Reasonable Revolutionary





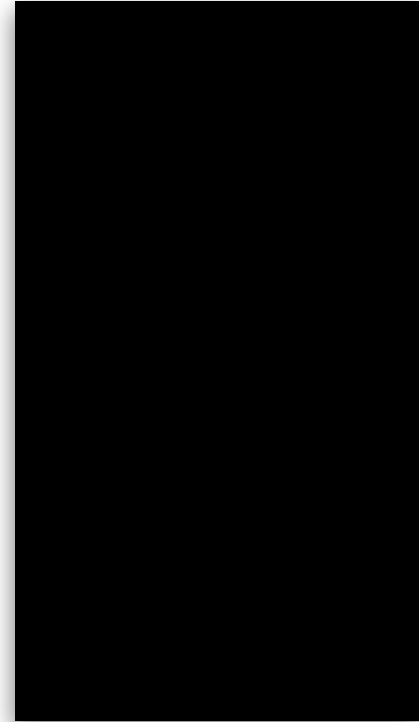
# Current Uses





# NBA TopShot

- Utilizes *Flow* instead of Ethereum
- Stores a short highlight clip of NBA moments
- Released in 2020
  
- Consumers purchase pack containing the NFT
- Packs and NFTs inside are in limited supply





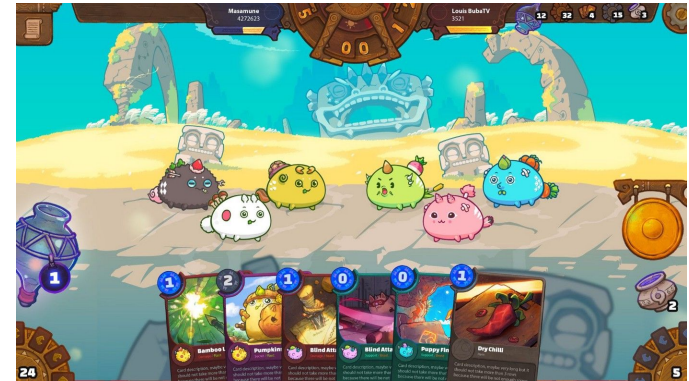
# Axie Infinity

- Players can train and battle with Axies
- Uses a Play to Earn model
- Players are rewarded with Smooth Love Potions (SLP)



## *Play to Earn*

- Players play and contribute
- Better the game
- Players are rewarded with SLP
- SLP upgrades Axies

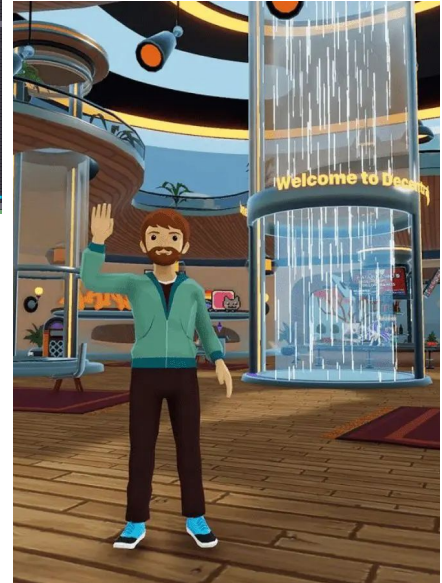






# Decentraland

- Virtual Reality Experience
  - Uses *MANA* currency within the world
  - Blocks of *LAND* or “Parcels” equate to 16mx16m of space within the digital world
  - Each *LAND* is represented by an NFT
- 
- Allows for customization through Decentraland SDK
  - Small Objects like Jukeboxes can be developed
  - Could develop a full club with admission price in *MANA*





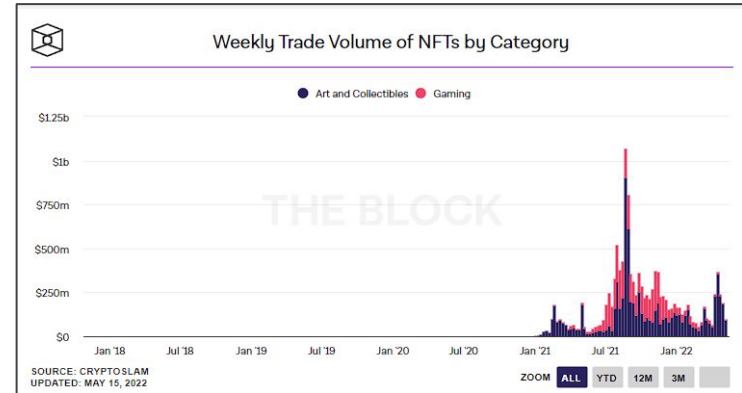
# Benefits / Downsides



# Benefits/Downsides

Good:

- Widely applicable
- No third party, entirely Decentralised
- Secure
- Transparent
- Promising Tech
- All the typical benefits blockchain technology provides!







# References

Smart contracts:

<https://www.investopedia.com/news/ethereum-smart-contracts-vulnerable-hacks-4-million-ether-risk/>

Labs, D. (2022). *NBA Top Shot*. NBA Top Shot. Retrieved 16 May 2022, from <https://nbatopshot.com/>.

*Smooth Love Potion (SLP) Logo .SVG and .PNG Files Download*. Crypto Logos. (2022). Retrieved 16 May 2022, from <https://cryptologos.cc/smooth-love-potion>.

*Axie Infinity*. Axie Infinity. (2022). Retrieved 16 May 2022, from <https://axieinfinity.com/>.

*Blockchain Gaming and the Rise of Axie Infinity*. Niko. (2022). Retrieved 16 May 2022, from <https://nikopartners.com/blockchain-gaming-and-the-rise-of-axie-infinity/?lang=en>.

Chittum, M., Strack, B., Hernandez, O., Strack, B., Harper, G., & Hernandez, O. (2022). *JPMorgan Enters the Metaverse With Virtual Decentraland Lounge - Blockworks*. Blockworks. Retrieved 16 May 2022, from <https://blockworks.co/jpmorgan-enters-the-metaverse-with-virtual-decentraland-lounge/>.

*Decentraland - Marketplace*. Market.decentraland.org. (2022). Retrieved 16 May 2022, from <https://market.decentraland.org/>.

*GitHub - decentraland-scenes/jukebox: A scene where you can play different songs by pressing buttons on a jukebox..* GitHub. (2022). Retrieved 16 May 2022, from <https://github.com/decentraland-scenes/jukebox>.

*Rarible Marketplace*. (2020). [Image]. Retrieved 16 May 2022, from <https://cwstatic.nyc3.digitaloceanspaces.com/2020/03/31/images/2/Rarible%20General%20NFT%20Layout%20NEW.jpg>.

OpenSea. (2021). *OpenSea Logo* [Image]. Retrieved 16 May 2022, from <https://www.readthegeneralist.com/briefing/opensea>.

The Block. (2022). *NFT market share image* [Image]. Retrieved 16 May 2022, from <https://www.theblockcrypto.com/data/nft-non-fungible-tokens/nft-overview/weekly-trade-volume-of-nfts>.

Veronica Coutts (2021). *NFT blockchain example* [Image]. Retrieved 19 May 2022 from [https://miro.medium.com/max/1082/1\\*Wf-3LNOLu6Dcdwmgm2zrQ.png](https://miro.medium.com/max/1082/1*Wf-3LNOLu6Dcdwmgm2zrQ.png)