

# Bildinhaltliche Tendenzen von NFT- Kunst in Korrelation zum wirtschaftlichen Erfolg auf OpenSea

Kurs: Einführung in die Digital Humanities WS 22/23

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Abstraction by anon

PaMs Original



The Memes by 6529 ✓



SmallBrosNFT ✓



Clone X – X Takashi Murakami, CloneX #1407, 2022/  
Ongoing Auction until 8. Dec. 2022

Current price

**7,36 ETH**

\$9.380,03

# Inhalt

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- The NFT Online Marketplace
- Idee
- Vorgehen
- Fragen / Probleme
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# The NFT Online Marketplace

- kryptografisch eindeutiges, unteilbares, unersetzbares und überprüfbares Token
- Repräsentation in einer Blockchain
- Erstmals in der Games-Branche benutzt

*(Foteini 2021)*



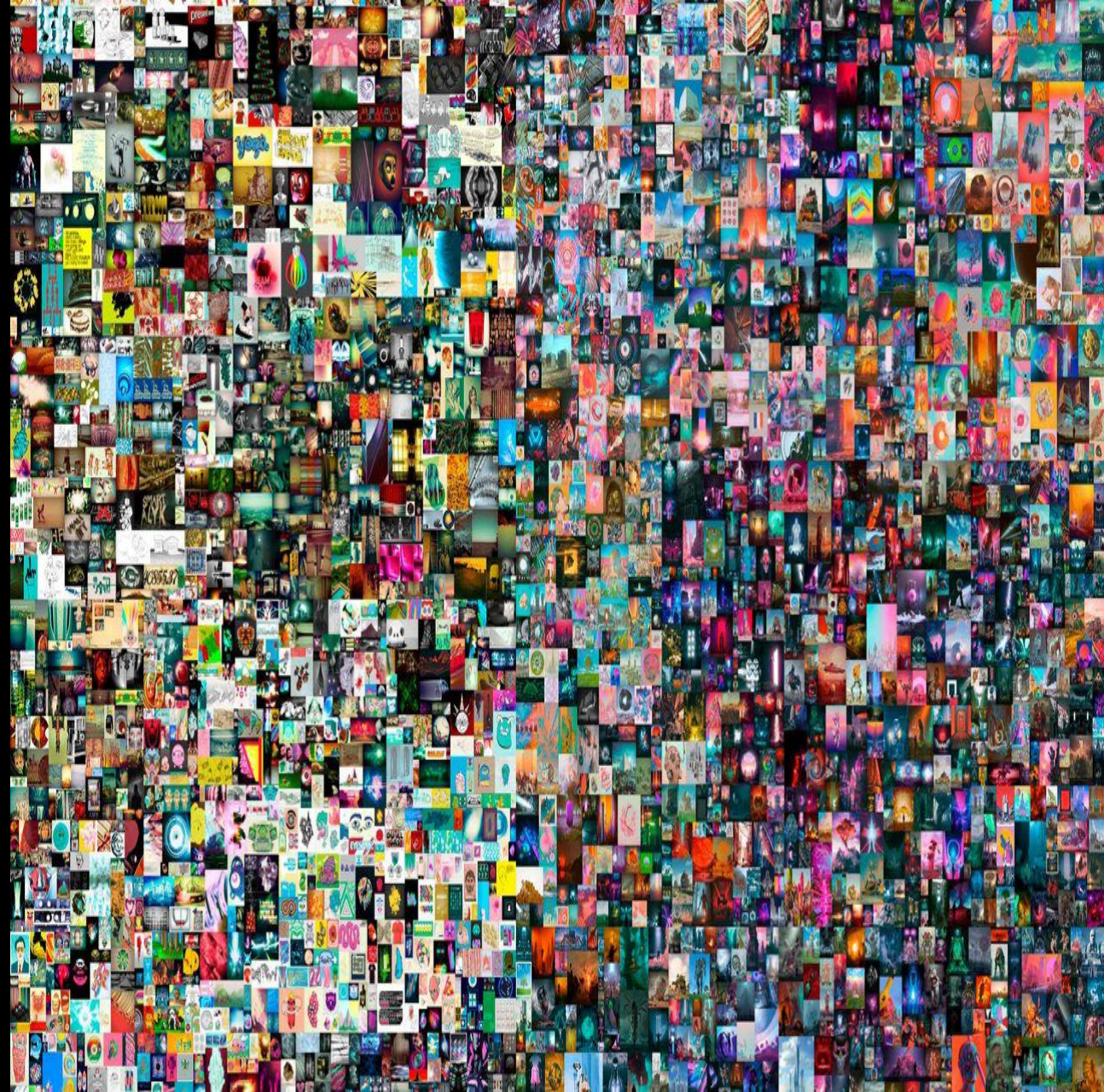


# The NFT Online Marketplace

- Virtueller/s Marktplatz/Auktionshaus
- Gegründet am 20. Dezember 2017
- Es wird hauptsächlich in Cryptocurrency (fast immer Ethereum ETH) gehandelt
- Setzt ein Krypto-Wallet voraus
- Über 80 Mio NFTs & 1 Mio User



**OpenSea**



Mike Winkelmann (aka beeples), Everydays: the First 5000 Days, 2021,  
digital(jpeg), 21,069 x 21,069 pixel





Beeple, BULL RUN #132/271, 2021

20 ETH  
\$25.489,20



Clone X – X Takashi Murakami, CloneX #1407, 2022

7,36 ETH  
\$9.380,03



Snoop Dog, Doggy #1990, 2022

0,095 ETH  
\$121,07



Damien Hirst, Ride off into space, 2021

4,4 ETH  
\$5.607,62

Bildinhaltliche Tendenzen von NFT-Kunst in  
Korrelation zum wirtschaftlichen Erfolg auf  
OpenSea

# Collection stats


Top

Trending


























Watchlist

Art ▾

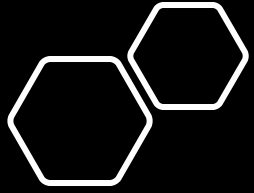
All chains

1h 6h 24h 7d 30d All

	COLLECTION	VOLUME ▾	% CHANGE ↕	FLOOR PRICE ↕	SALES ↕	% UNIQUE OWNERS ↕	% ITEMS LISTED ↕	
1	 <b>CryptoPunks</b> 	847 ETH	+334%	—	12	37% 3.658 owners	0% 0 of 9.998	
2	 <b>Bored Ape Yacht Club</b> 	227 ETH	+51%	68.90 ETH	3	64% 6.421 owners	7% 660 of 9.998	
3	 <b>Cel Mates by Mcbess</b> 	212 ETH	—	0.45 ETH	272	51% 962 owners	29% 552 of 1.876	
4	 <b>Cel Mates Crime Reports</b> 	203 ETH	+169%	0.68 ETH	271	30% 1.247 owners	4% 151 of 4.207	
5	 <b>Abstraction by anon</b>	126 ETH	-49%	1.58 ETH	81	71% 237 owners	32% 108 of 333	
6	 <b>Light Years by Dmitri Cherniak - Selection Pass</b> 	92 ETH	-83%	27.70 ETH	3	76% 74 owners	18% 18 of 98	
7	 <b>The Memes by 6529</b> 	81 ETH	+6%	0.25 ETH	205	16% 4.548 owners	—	
8	 <b>Friendship Bracelets by Alexis André</b> 	57 ETH	+10%	0.28 ETH	128	37% 9.262 owners	6% 1.489 of 25.320	
9	 <b>Non-Fungible Moons</b>	50 ETH	—	0.19 ETH	369	53% 272 owners	20% 104 of 513	

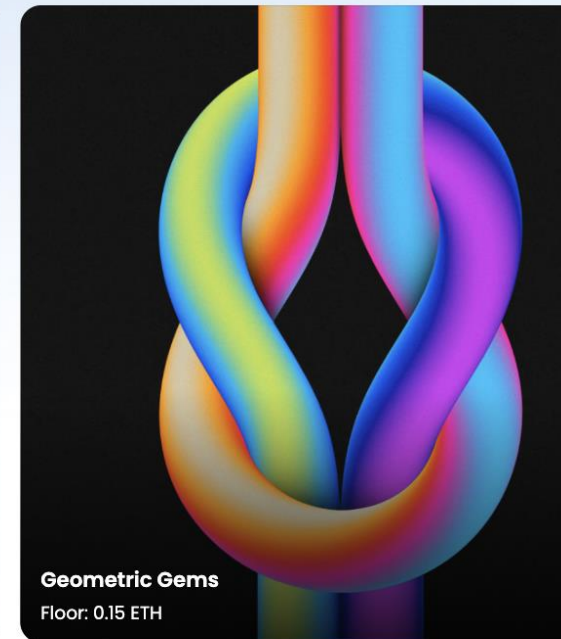
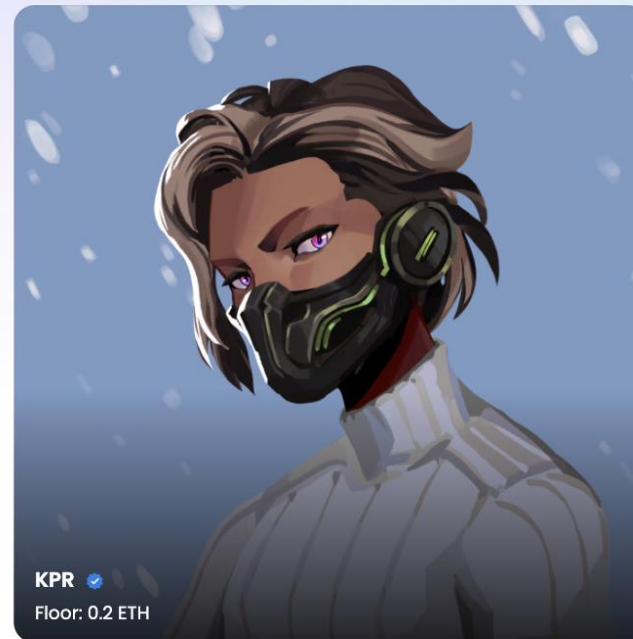




Vorgehen



# Web Scrapping With Python



# Fragen

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thirteen\_, The Question, 2022/ Ongoing Auction until  
25. Dec. 2022

Minimum bid -- Reserve price not met.

**0,13 WETH**  
\$158,05





# Wie bekommen wir eine API für Opensea?

## Was wären die Alternativen?

SDK Partners M

<> API Reference Changelog

## API Overview

The OpenSea API helps developers build new experiences using NFTs and our marketplace data. We provide a set of endpoints that enable you to fetch ERC721 and ERC1155 token metadata as well as other core elements of our marketplace, including events, collection, listings, offers, and more. We offer these endpoints because we believe in composability in web3 and want to extend access to this data to anyone that wishes to build on top of it. However, if you use this data we require that you join us in our mission of building a composable and decentralized web3 ecosystem by reciprocating and offering us equivalent levels of access to your data through an API and complying with our Terms of Service.

Additionally, we provide this API free of charge and ask that you provide attribution to OpenSea on your site or in your app. When using our API, you should link to the OpenSea marketplace from the NFTs that you display, where appropriate. Please see our Logos & Brand Guidelines for images that you can use for OpenSea attribution.

Our API is rate-limited – if you'd like to use it in a production environment, please request an API key.

0 s

```
1 #Opensea's homepage
2 os_url = 'https://opensea.io/'
3 os_rankings_url = 'https://opensea.io/rankings'
4
5 # Use requests to retrieve data from a given URL
6 os_response = requests.get(os_rankings_url)
7
8 # Parse the whole HTML page using BeautifulSoup
9 os_soup = BeautifulSoup(os_response.text, 'html.parser')
10
11 # Title of the parsed page
12 print(os_soup.title)
13
14 # We can also get it without the HTML tags
15 print(os_soup.title.string)
```

<title>Access denied</title>  
Access denied

0 s

```
1 def extract_source(os_rankings_url):
2     agent = {"User-Agent": "Mozilla/5.0"}
3     source = requests.get(os_rankings_url, headers=agent).text
4     return source
5
6 def extract_data(source):
7     names = os_soup.findAll('span', {'class': 'sc-29427738-0 sc-d58c749b-0 iBWBGk ipKiCP'})
8
9 print(extract_data('https://opensea.io/rankings'))
10
```

None

Sollten wir  
ein Cryptowallet für die  
API erstellen?

Dieses dann mit echten  
Namen oder Pseudonym?

The screenshot shows the OpenSea Developers website. The top navigation bar is blue with the OpenSea logo and 'Developers' text. Below it, there are links for 'v1.0', 'Home', 'Guides', 'API Reference' (which is highlighted), and 'Changelog'. On the left side, there is a 'JUMP TO' search bar and a list of API endpoints. Most endpoints have a green 'GET' button next to them. The main content area is titled 'Request an API key' and contains a text block explaining that the API is rate-limited and a link to request a free API key. Below this is a form titled 'OpenSea API Request Form' with a section for 'API Request' containing an 'Email Address' field with an asterisk and a note about using a corporate email for company requests. There is also a text input field labeled 'Meine Antwort'.

OpenSea Developers

v1.0 Home Guides API Reference Changelog

JUMP TO

**OpenSea API**

- API Overview
- Asset Model
- Asset Contract Model
- Event Model
- Account Model
- Collection Model
- Retrieve assets GET
- Retrieve an asset GET
- Validate an asset GET
- Retrieve events GET
- Retrieve collections GET
- Retrieve bundles GET
- Retrieve a contract GET
- Retrieve a collection GET
- Retrieve collection stats GET
- Retrieve owners GET
- Retrieve orders
- Create orders

## Request an API key

This API is rate-limited. You can experiment with it and omit the key, but if you'd like to use it in a production environment, please request a free API key here:

### OpenSea API Request Form

[In Google anmelden](#), um den Fortschritt zu speichern. [Weitere Informationen](#)

**\* Erforderlich**

#### API Request

**Email Address \***

If you're requesting on behalf of your company/project please put your corporate email address and specify as such in the "Project Description" below

Meine Antwort



Wir haben gelesen,  
dass “get requests”  
limitiert sind. Was  
heißt das für uns?  
Müssten wir das  
selbst kodieren?











## API FAQs

**What is the default rate limit?**

`GET` requests are limited to 4/sec per API key. `POST` requests are limited to 2/sec per API key.

# Top 200 Ranking

Ist es machbar, die Bilder von den Top 200 Künstlern, zu analysieren? Top 100? Top 50?

Trending		Top		24h		All chains		View all	
COLLECTION		FLOOR PRICE		VOLUME		COLLECTION		FLOOR PRICE	
1	 RTFKT Animus Egg	1.18 ETH	922 ETH			6	 CryptoPunks	—	195 ET
2	 3D Invisible Friends	0.59 ETH	711 ETH	+1,549%		7	 KILLABEARS	3.80 ETH	182 ET
3	 Light Years by Dmitri Cherniak - Selection Pass	31 ETH	532 ETH			8	 RarePass: Genesis	35 ETH	148 ET
4	 CLONE X - X TAKASHI MURAKAMI	7.19 ETH	220 ETH	+17%		9	 Pre-Process by Casey REAS	7.48 ETH	135 ET
5	 Abstraction by anon	1.19 ETH	209 ETH	+170%		10	 Bored Ape Yacht Club	68.90 ETH	134 ET



# Quellen

- Bainotti, L., Caliandro, A., & Gandini, A. (2021). From archive cultures to ephemeral content, and back: Studying Instagram stories with digital methods. *New Media & Society*, 23(12), 3656-3676.
- Chapagain, A. (2019). *Hands-on webscraping with Python*. Packt Publishing.
- Chen, Y., Wang, Z., Liu, X., & Wei, X. (2022). A New NFT Model to Enhance Copyright Traceability of the Off-chain Data. *International Conference on Culture-Oriented Science and Technology*, 157-162. <https://doi.org/10.1109/CoST57098.2022.00041>
- Foteini, V., Bikakis, A., Terras, M., Speed, C., Hudson-Smith, A., Chalkias, K. (2021). Crypto Collectibles, Museum Funding and OpenGLAM: Challenges, Opportunities and the Potential of Non-Fungible Tokens (NFTs), <https://www.mdpi.com/2076-3417/11/21/9931>
- Haßler, J., Kümpel, A.S., & Keller, J. (2021). Instagram and political campaigning in the 2017 German federal election: A quantitative content analysis of German top politicians' and parliamentary parties' posts. *Information, Communication & Society*, 1-22. <https://doi.org/10.1080/1369118X.2021.1954974>
- Mitchell, R. (2018). *Web scraping with Python*. O'Reilly Media.
- Ozone Networks, Inc. (2018). *Rankings*. OpenSea. <https://opensea.io/>
- Vairagade, R., Bitla, L., Judge, H., Dharpude, S., & Kekatpure, S. (2022). Proposal on NFT Minter for Blockchain-based Art- Work Trading System. *11th IEEE International Conference on Communication Systems and Networking Technologies*, 571-576. <https://doi.org/10.1109/CSNT54456.2022.9787667>