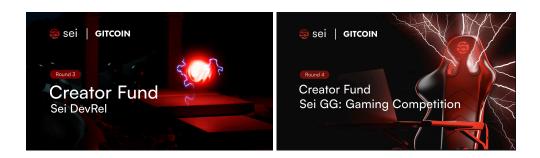
Exposing Fraudulent Activity in the Sei Creator Fund Round 3



We, a team of dedicated developers on the Sei network, have discovered a concerning level of exploitation and fraud in relation to the Sei Creator Fund rounds recently active on Gitcoin.

We have hard and clear evidence identifying at least 20 projects involved in manipulating voting and attempting to defraud the fund for around 500,000 \$SEI of the matching funds.

As we will see in the report below, at least \$20,000 worth of the donations can be directly linked to this fraudulent behaviour across 3,070 wallets. That's almost 20% of the entirety of the funds donated across both rounds.

The purpose of this document is to provide visibility, transparency, and accountability to the underhanded methods on display in the Creator Fund rounds and present the tangible evidence toward them.

A large amount of research, analysis, and development has gone into identifying the fraudulent activity at play within the Creator Fund. This reflects our passion for the success of Sei and its ecosystem in the bigger picture.

We have not provided solutions as to how we think the Sei Foundation should deal with this information, as that is not our call. Our purpose is to draw attention to those who would spend more time and effort figuring out how to exploit a voting mechanism than to deliver content or a product of true value to the ecosystem.

Please also note this is by no means a fully comprehensive report. Though we are a group of professionals who take pride in our work, we are limited by time and resources, and have delivered the contents of this report where circumstances allowed, succinctly and with accuracy.

Vote Manipulation Methods

Based on the ranking mechanisms Gitcoin has exposed in its API, there are essentially two vectors by which a user can manipulate the voting to their advantage.

- 1. Total Unique Donors
- 2. Total Amount Donated (in USD or \$SEI)

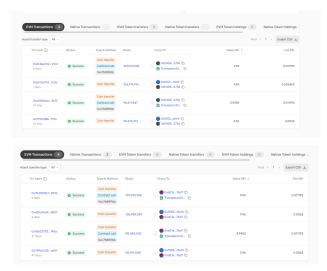
Below are the most common means by which a user can game the system.

- 1. Botting via single-purpose wallets
- 2. Botting via brand new wallets
- 3. Botting via wallets with a common funder
- 4. Pyramid Scheme Vote-for-Vote

There are undoubtedly more methods at play out there, but we have found these four to be the most common and egregious. Some projects are using multiple combinations of the above, others are just using one. Though vote manipulation appears to be rampant in this round to the extent we felt the need to intervene and expose it.

Botting via single-purpose wallets

The simplest way for a user to game the system is to create a wallet that exists only to add to the gitcoin contribution fund. These wallets serve only to receive an initial amount of money from a wallet and donate the received money to Gitcoin. They do not interact with the Sei ecosystem in any other way.



Two wallets that have only ever received funding and voted in creator funds

Benefit

Improves on the total unique donors metric score in Gitcoin.

Detection Method

By tracing historical transactions on wallets using systems like Celatone and Mercury, we can put together a picture of how many of this type of wallet exists in the creator fund round.

Example wallets:

0xae1a9031a1fd32d1e7c2f1465323e0e86af376d7 0xe4083715e7f07c72840fea501f8d28ba94322756 0xc534490ab6664b7596419841e35af9b5637114da 0x511ea49d73e20c7a2f75b0efc0ecabeaf117f8fe 0xdb5acb917181b045c20bdd39a1b787e7f6b1ab58 0x62903499392d8a3851555312ea9cd798c3ade0b0 0x6c929ff8f5f88bf1428f38c08c6a4e6cac370d06 0x312e5dc84c6ec585a6b9a4252bd948cf1ad5b356 0xc35d01b4d45cc21ece05b6c5600ab6e2b4bc4b8a 0x3a6d760c125e81f1bf85113b15cf7b706edf0dd1

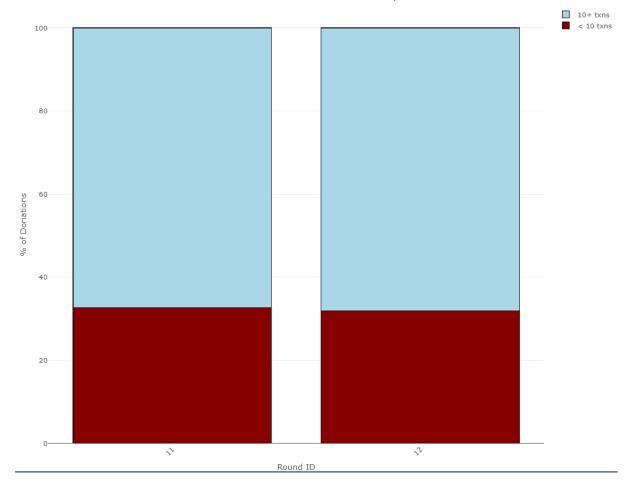
Project Name	#EVM TXs	# Cosmos TXs	Count
SeiTalk	4	2	139
SeiGPT	2	1	123
Mizzy	2	1	59
Seitrace	3	2	51
CLOAK	1	2	34
Sei Awesome	2	1	32
CLOAK	3	3	23
SEIS AI	2	2	20
CLOAK	4	4	18
Resource X	4	2	18
SEI SDK	4	2	18
The Consortium	4	5	18
Code Node	4	2	17
Seiducation	4	2	17
Simply Better	4	2	17
Mizzy	2	2	16
Seile	1	1	16
The SEIDevEducation Series	2	1	16
SeiTalk	5	2	15
Seiccess	4	2	15
Satoci	1	1	12
SeiDash	1	1	12
Code Pillar	4	2	11
Omni Potence	1	1	11
SEIS AI	2	1	11

Above is a table of projects grouped by the most transactions amount. It is rare for any two wallets voting for a project to have the same number of transactions if they are regular users on the Sei network.

To explain in plain words: SeiTalk has donations from 139 wallets that have exactly 4 EVM TXs and 2 Cosmos TXs. These wallets serve no other purpose than to receive money and donate to the SeiTalk project. All of of the projects above are clear examples of projects that have been subjected to heavy botting.

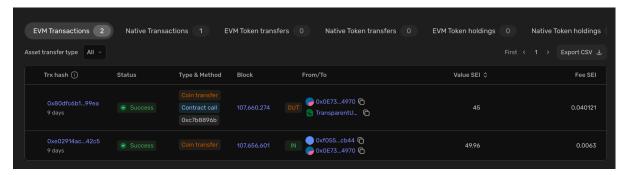
Round Breakdown:

Stacked Column Chart of Low TX Count by Round ID



As can be seen in the chart, the split of this criteria is pretty even between both rounds, with DevRel Round 11 providing a marginally-higher percentage of donations (32.7%) from wallets with under 10 transactions on Sei. The Gaming Round 12 has 31.9% of all donations from low-transaction wallets.

Botting via brand new wallets



New wallet (created post-kickoff of the Creator Fund) that also acts as a single-pupose wallet.

Similar to Botting via brand new wallets, another tell-tale sign of vote manipulation is when a project receives funding from a wallet that is brand new. Most of the time, said wallet has been created after the Gitcoin founder round has begun.

Benefit

It is generally known that the purpose of these rounds is to incentivise new users to the chain, so it is assumed there is a scoring benefit in the "net new" wallets involved in the voting for a particular project.

Detection Method

The wallet's age is assumed to be from the date of the first transaction involving that wallet.

Example Wallets:

0x6d4f2a3e973e016acf04201afa3bde2db3e24e63 0xb3f0dc408c2d2f7708f27d29e831979061d415bd 0x59019cc09d8dabcaf007042fc822021e26a7e17f 0x0e90a52ab94453fbf35ed90d8c64ff7c5881dae7 0xd32ee7fb1796a84fcaae4250432d585ee7df905e 0x76641d06cc7bad413b4eabfffc78aec3aeb267b4 0xc480d9dea270669120b4c409b3f45f13f0bc2d69 0x868fe11a98ec6e307adfce03ac4666dd7e3ae823 0x2f5f10d8136a986df4943c3b4c335032268d3789 0xf33e14f1ed1255596b03cf6e09b23d68f2a4efe0

Project Focus:

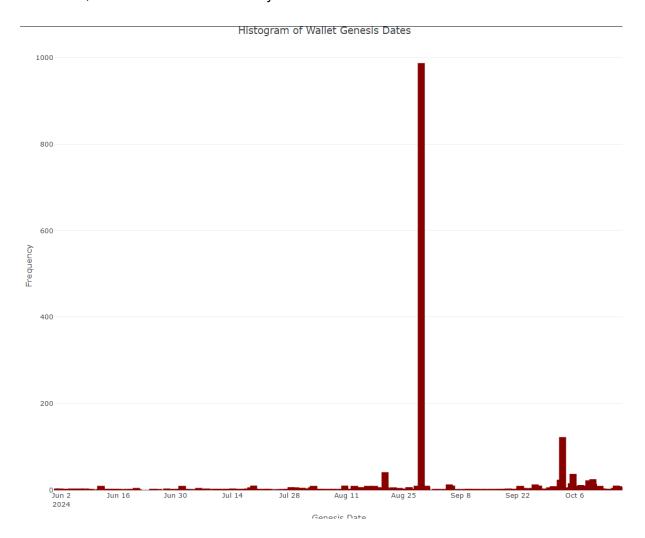
Project Name	Median Wallet Genesis Date	Donor Count
Mizzy	2024-10-10	95
CLOAK	2024-10-09	133
A Technical Zero To Hero Course on SEI	2024-09-09	38
Code Pillar	2024-09-09	44
Omni Potence	2024-09-09	95
SEI SDK	2024-09-09	53
Satoci	2024-09-09	115
Sei Awesome	2024-09-09	76
Sei Unity SDK	2024-09-09	13
SeiDash	2024-09-09	144
SeiGPT	2024-09-09	143
SeiScope	2024-09-09	14
SeiTalk	2024-09-09	185
Seiccess	2024-09-09	38
Seiducation	2024-09-09	47
Tokenomics Lab	2024-09-09	30
cris-the-dev	2024-09-09	205
Sei Learn	2024-09-01	32
Echo	2024-08-30	21
Simply Better	2024-08-28	51
codesei	2024-08-28	54
sheggzie	2024-08-25	16
SEIS AI	2024-08-25	47
Seitrace	2024-08-24	147

The above table shows a list of projects in ascending order of their creation date - assumed to be the date of first transaction on Cosmos or EVM, whichever happened sooner.

The projects in yellow have been highlighted due to the curious nature of how the median genesis date for all of them occurred within 24 hours of each other. This may indicate some off-chain coordination, though facts and not speculation is the goal of this report.

The next largest cluster of common genesis dates is on 2024-08-20, where 6 projects share a common genesis date. This date falls in the middle of the previous Sei Creator Grant Fund, so this makes sense as a time when a high number of wallets would be created for similar vote manipulation purposes.

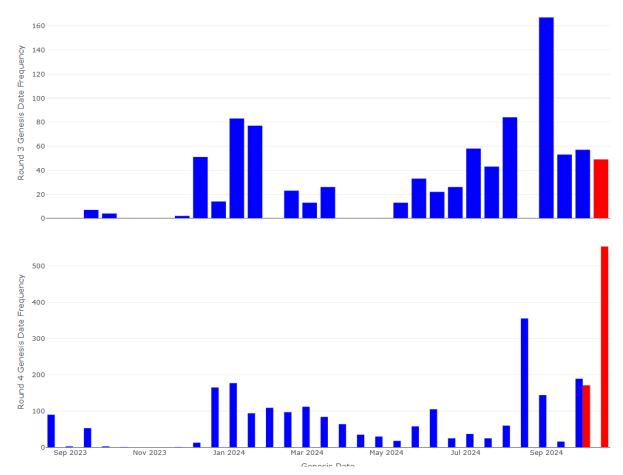
However, the largest group of wallets created on the same date totals 1,042 unique addresses, all created on the same day - 2024-08-29.



#	Project	Count Donor Wallets from 2024-08-29
1	SeiTalk	165
2	SeiGPT	126
3	Seitrace	87
4	SeiDash	78
5	LAKZONE GAMING GUILD	76
6	Nathoi 🔴 🇨 🌊	70
7	SEI WARRIORS	70
8	Sei Awesome	70
9	Satoci	69
10	THU FUONG 🔴💨	67

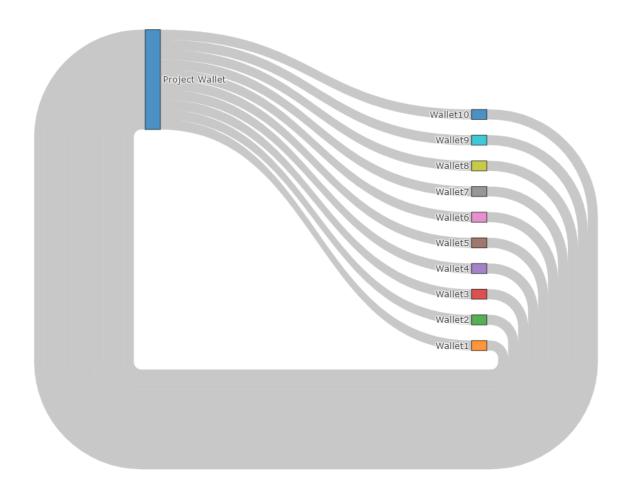
And here the top 10 the list of projects donated to by wallets that had their first recorded transaction on either Cosmos or EVM on 2024-08-29. While the top two are the most

obvious-looking of this group, it's entirely possible there is a large amount of offline vote-sharing being coordinated here, with a lot of the counts falling around the 70 mark.



The highlighted sections show wallets created in the two weeks of the Creator Funds. Notice how the Gaming Round was abused during the end of the round.

Botting via Common Funder Wallet



It is remarkably easy to create a new wallet once a user has an already established wallet. Some projects are leveraging this to fabricate a gap between the project creator's wallets and the fictitious donations.

Benefit

This can drastically increase the unique donor count of each project in a very time-efficient manner.

Detection Method

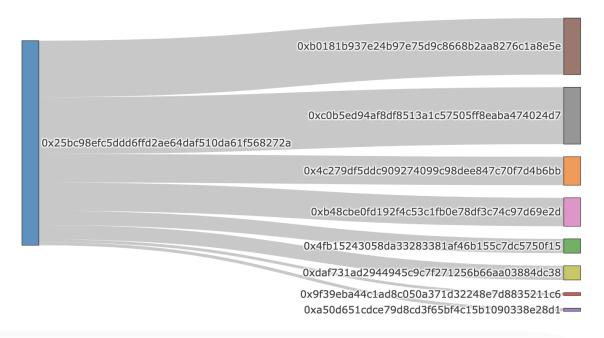
We run an algorithm that checks the first payment the donor wallet receives and capture the sender. In some cases, we iterate over several "hops" and trace back to the original funder's wallet. We put in handlers so that exchange addresses are avoided.

Example Wallets:

This wallet - 0x25bc98efc5ddd6ffd2ae64daf510da61f568272a - is the common funder for 8 wallets:

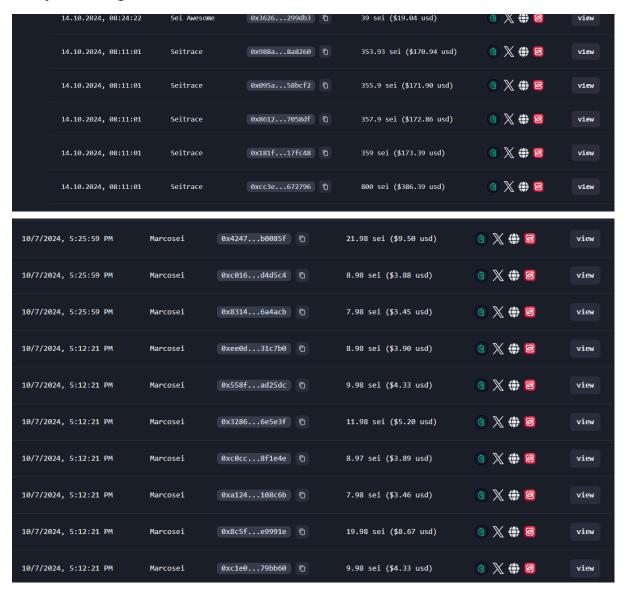
0x4c279df5ddc909274099c98dee847c70f7d4b6bb 0x4fb15243058da33283381af46b155c7dc5750f15 0x9f39eba44c1ad8c050a371d32248e7d8835211c6 0xa50d651cdce79d8cd3f65bf4c15b1090338e28d1 0xb0181b937e24b97e75d9c8668b2aa8276c1a8e5e 0xb48cbe0fd192f4c53c1fb0e78df3c74c97d69e2d 0xc0b5ed94af8df8513a1c57505ff8eaba474024d7 0xdaf731ad2944945c9c7f271256b66aa03884dc38

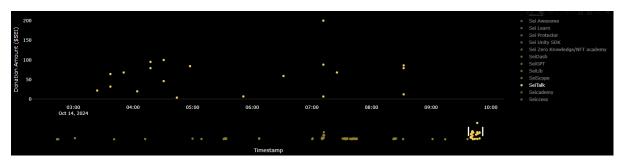
And their connects are shown below, with link sizes determined by relevant donation amount:



For perspective, the largest donation from wallet 0xc0b5ed94af8df8513a1c57505ff8eaba474024d7 is 200 \$Sei and the smallest is 0xa50d651cdce79d8cd3f65bf4c15b1090338e28d1 with 11 \$Sei.

Lazy Botting





"Lazy" botting is when a project is automating votes to endorse itself, but is not concerned with covering up its tracks. This means a project will receive multiple donations at the exact same second, indicating they have been triggered by an automated command, as opposed to a co-ordinated manual donation.

Benefit

The main benefit of this is that it's easier to vote.

Detection Method

We group donations to a project by timestamp and this activity becomes obvious.

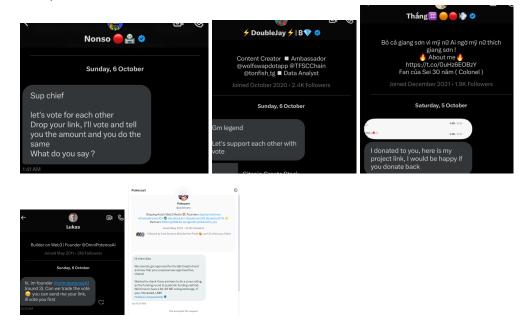
Project Focus:

Project Name	Donation Timestamp	Count
cris-the-dev	2024-10-11T13:50:03+00:00	27
SeiTalk	2024-10-08T06:58:47+00:00	18
SeiGPT	2024-10-11T04:36:42+00:00	15
SeiGPT	2024-10-11T04:23:16+00:00	14
SeiTalk	2024-10-08T07:12:55+00:00	14
cris-the-dev	2024-10-12T02:57:43+00:00	14
cris-the-dev	2024-10-10T12:09:00+00:00	11
SeiGPT	2024-10-08T11:15:41+00:00	10
SeiGPT	2024-10-11T05:03:46+00:00	10
cris-the-dev	2024-10-10T11:42:01+00:00	10
cris-the-dev	2024-10-10T11:55:31+00:00	10
cris-the-dev	2024-10-13T03:09:54+00:00	10
SeiGPT	2024-10-11T04:50:18+00:00	9
SeiTalk	2024-10-10T14:26:26+00:00	9
SeiGPT	2024-10-12T06:17:56+00:00	8
SeiTalk	2024-10-09T02:20:34+00:00	8
SeiTalk	2024-10-08T06:44:25+00:00	7
SeiTalk	2024-10-08T07:26:56+00:00	7
Seipex Finance	2024-10-03T19:04:36+00:00	7
SeiGPT	2024-10-06T17:38:00+00:00	6

This table shows the Projects who most egregiously execute simultaneous votes. The table has a granularity of 1 second.

Pyramid Scheme Vote-for-Vote

This one is much harder to detect. We have had to rely on the goodwill and support of the Sei community to let us know when they have been contacted as part of this scheme. The idea here is that a rising tide lifts all boats, but in reality this benefits only a very few overactive vote-swappers, while penalising those who don't wish to participate. Such vote-swapping is against the rules of the fund, which needs to focus more on output than manipulation.



Benefit

The pyramid scheme nature of this manipulation should be clear - the more people who acquiesce and reciprocate, the more you will be rewarded.

Detection Method

There is no automated method for extracting this, so we have relied on the goodwill of the community and the many people who are volunteering with the large numbers available.

This method will not be developed in full as we cannot leverage automated means for this. However if there is enough support and contribution of evidence from around the community, then this could be built out further, potentially even for statistical analysis.

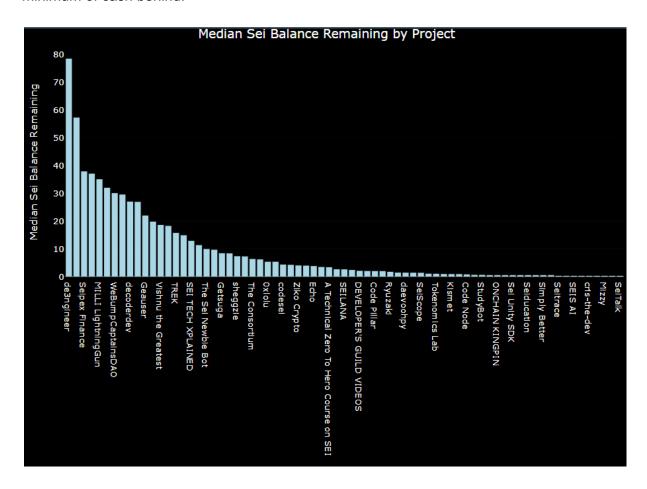
Other Tells

Alternate means of detecting voter fraud

Where in the previous section the aim was to focus on the methods of fraud, it is by no means exhaustive, and no doubt there are some clever scammers who are extremely competent at covering their steps

Low remaining balance

Something that also goes hand-in-hand with single purpose wallets, it's possible to look across all project donors and see which ones actually have funds left in their wallet. No reasonable person is going to use all their funds for voting. These are almost certainly fake wallets created by fraudsters and they don't want to leave anything except the absolute minimum of cash behind.



Project Name	Median Sei Balance Remaining in Wallet
SeiTalk	0.007615
SeiGPT	0.008807
Mizzy	0.048807
Sei Awesome	0.082938
cris-the-dev	0.107156
CLOAK	0.169411
SEIS AI	0.183527
The SEIDevEducation Series	0.188807
Seitrace	0.193196
Sei Zero Knowledge/NFT academy	0.280012
Simply Better	0.360038
SEI SDK	0.452969
Seiducation	0.458322
Resource X	0.477131
Chain link	0.477355
Sei Unity SDK	0.477355
ONCHAIN KINGPIN	0.483725
SeiLib	0.49288
StudyBot	0.602691
Sei Protector	0.619282
Code Node	0.776021
RAGER - ESPARTANS	0.873373
Kismet	0.875067
Seiccess	0.9013445
Tokenomics Lab	0.9944035

The above table shows the median Sei balance remaining across all the wallets that voted for a project.

Attempt to manipulate quadratic funding

In the specific case of Sei Protector, wallet

0x66956c04ae41211902a0fdb20e99bf54c3940d69 voted for all 73 projects in the round. The stilted nature of the votes suggests that this was done tactically and not in good faith.

On the 4th of October, this wallet donated 500 \$Sei to Sei Protector and 2.55 \$Sei each to the other 72. The only obvious upside of this is to attempt to skew the algorithm in their favour.

Also there has been a previous direct interaction between both of these wallets, so it is highly likely that they are either co-ordinated, or the same person.

Sei Protector project wallet: 0x8e15df9c89462b33cbeecbc80084b3d499ccfe6d

Previous interaction between these wallets: 0xfd2df11a800fff95b1a438a5ff37d0fc7d3acfb4d69c24921771d004d728ccd0

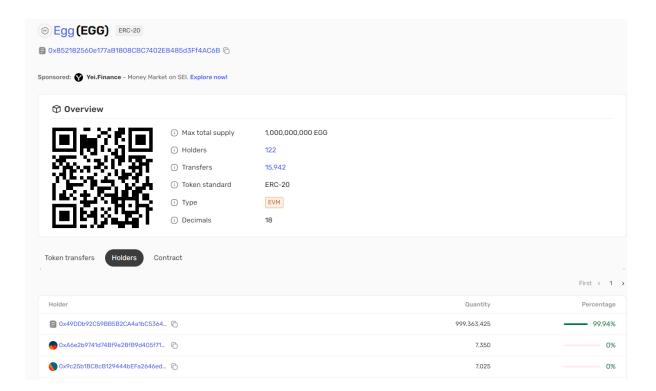
		DonationAmount
1	Sei Protector	500.00
2	SEIlluminati	2.55
3	Seile	2.55
4	sheggzie	2.55
4 5 6	WeBumpCaptainsDAO	2.55
6	Sei Learn	2.55
7	Learn SEI with developers	2.55
8	Code Node	2.55
9	MILLI LightningGun	2.55
10	Block 24	2.55
11	Mizzy	2.55
12	Raid Rewards For SEI	2.55
13	Resource X	2.55
14	CLOAK	2.55
15	Torii Exchange	2.55
16	InterBug AI	2.55
17	cris-the-dev	2.55
18	SeiTalk	2.55
19	SEI TECH XPLAINED	2.55
20	Simply Better	2.55
21	SEINALYTICS	2.55
22	RAGER - ESPARTANS	2.55
23	The Consortium	2.55
24	Chain link	2.55
25	daevoohpy	2.55

Falsifying transactions

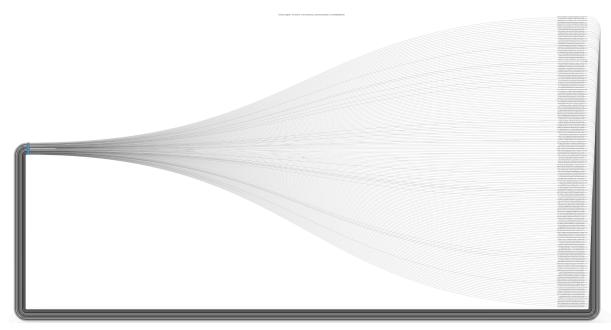
Some projects have been falsifying transactions in order to make their donor base look more "active" on Sei. One of the ways identified as this is distributing a token to a Project's donors to pump up their transaction count.

EGG token: 0x49DDb92C59BB5B2CA4a1bC53646C27E3618777F5

EGG is a token that 99.94% owned by one wallet and a small amount has been distributed to dozens of other users. 40 total donors who participated in the voting round and hold EGG also voted for cris-the-dev.



Project Wallet Funds Donor Wallets



The project wallet for Marcosei directly funded 167 of its 205 donor wallets, making up 93.22% (2,341.6 \$Sei) out of its total donations (2511.9 \$Sei)

Previously common funder wallets have been discussed, but in some cases, the common funder wallet is the wallet associated directly with the Gitcoin project itself. Marcosei is a particularly notorious example here, with 167 wallets being directly funded by the project wallet.

Sankey diagrams become difficult to visualise after about 10 connections, so please note that the image above is scaled down from approximately a 64k pixel width in order to fit on the page.

Model and Evaluation

Scoring Variables

Below is a list of the top 10 projects by evidence of vote manipulation. A score was calculated for each project based off the following computed binary variables, which can be found in the accompanying dataset.

Metric	Description		
low_tx_wallet	wallets have a combined transaction count between EVM and Cosmos < 10		
young_wallet	wallets were found to have been created after the kickoff time of both rounds (>= 2024-10-03)		
sus_day_wallet	wallets were found to have been created on 2024-08-29, a day where a wildly abnormal amount of wallets were created (10x a normal day)		
lazy_bot	wallets that were found to have voted at the exact same second as other wallets for the same project		
prolific_funder	wallet was initially funded by a wallet that also funded between 11 and 99 other wallets (and is not a known CEX)		
low_balance_wallet	wallet has under 1.25 \$Sei remaining in it since voting		

A basic model was formed based on the above calculated variables, with weights assigned based on logical likelihood of fraud. For example, it's possible that prolific funding maybe be the cause of an undetected bridge or CEX, so that is given a weight of 1, whereas the low_tx_count is an intentional giveaway of botting, so that variable is given a weight of 5.

These variables are weighted as such in calculating the model score:

Metric	Weight
low_tx_wallet	5
young_wallet	2
sus_day_wallet	3
lazy_bot	4

prolific_funder	1
low_balance_wallet	3

Now with the premise for a basic model, we can assign the above variables to each wallet and calculate a rudimentary score. This is then aggregated up into a project level for better understanding of which projects are likely funded through unethical means.

In order to provide the fairest possible look, the table has been sorted by ScorePerDonor, which is the ModelScore / DonorCount. This is to help mitigate the on genuine, smaller projects that may have been touched by one or more botted projected who were trying to cover their tracks by spreading votes with the intended appearance of being more organic.

The full table is presented below.

Model Scores

ProjectName	round_id	ModelScore	DonorCount	ScorePerDonor
SeiGPT	11	107.444444	151	0.7115526122
Digitstak X SEI GAMING	12	97.0555556	148	0.6557807808
jiamigou	12	168.2777778	259	0.6497211497
TheCryptoBlade	12	70.61111111	113	0.6248770895
Nine 23 SEI Gaming Creator Project	12	20.4444444	34	0.6013071895
Mystic	12	66.5555556	112	0.5942460317
Zack	12	67.4444444	114	0.5916179337
SeiTalk	11	144.3888889	248	0.5822132616
Marcosei	12	117.8333333	205	0.574796748
Mizzy	11	54.61111111	100	0.5461111111
Seicademy	11	27.83333333	53	0.5251572327
Tokenomics Lab	11	35.27777778	68	0.5187908497
Hanna	12	73.72222222	147	0.5015117158
Sei Awesome	11	57.5	115	0.5
The Nest x Sei Gaming	12	54.7777778	111	0.4934934935
SEIS AI	11	41.0555556	85	0.4830065359
CLOAK	11	76	160	0.475
Coha05	12	58.38888889	125	0.4671111111
Cryptocheongchun	12	6.833333333	15	0.455555556

DAORIC	12	9.77777778	22	0.444444444
IRIT_on_SEI	12	33.83333333	82	0.412601626
DojiTV 📺	12	6.94444444	17	0.408496732
CryptoJack444	12	16.7222222	41	0.4078590786
fawz	12	4.833333333	12	0.4027777778
Illuminating stars	12	42.5	107	0.3971962617
StudyBot	11	13.2222222	34	0.388888889
Seiccess	11	21.9444444	57	0.3849902534
Sei Entertainment Fund	12	4.611111111	12	0.3842592593
Connieee 🐝	12	13.77777778	36	0.3827160494
4JusticeWeb3 by JUSTICE	12	9.111111111	24	0.3796296296
NFTPERKS	12	12.88888889	34	0.3790849673
Ririn	12	30.5555556	81	0.3772290809
SeiLib	11	7.833333333	21	0.373015873
A Technical Zero To Hero Course on SEI	11	17.11111111	46	0.3719806763
Sei Wars	12	46.11111111	124	0.3718637993
Zuri	12	14.4444444	39	0.3703703704
SEI SDK	11	27.38888889	74	0.3701201201
SeiScope	11	8.44444444	23	0.3671497585
Seitrace	11	74.88888889	204	0.3671023965
SEI ANNE PLAY	12	24.11111111	66	0.3653198653
Seiducation	11	21.83333333	60	0.3638888889
Mega Ventures	12	22.11111111	61	0.3624772313
The SEIDevEducation Series	11	19.88888889	55	0.3616161616
Alisa	12	23.88888889	67	0.3565505804
两仪式	12	2.833333333	8	0.3541666667
ONCHAIN KINGPIN	11	10.61111111	30	0.3537037037
Sei Unity SDK	11	7.333333333	21	0.3492063492
Kismet	11	9.05555556	26	0.3482905983
Jaxx 神 (DKS)	12	6.611111111	19	0.3479532164
babulenok54	12	13.5555556	39	0.3475783476
Eric	12	6.94444444	20	0.347222222

Dany	12	10.27777778	30	0.3425925926
Xen's Gaming Playbook	12	4.111111111	12	0.3425925926
ladimeji3	12	5.44444444	16	0.3402777778
Simply Better	11	21.66666667	64	0.3385416667
elabs	12	5.72222222	17	0.3366013072
Zues	12	41.9444444	125	0.335555556
WEB3 Gaming Content Series	12	29.4444444	88	0.3345959596
1Minute Web3	12	4	12	0.333333333
Odin	12	28.2222222	85	0.3320261438
Feezy	12	22.38888889	68	0.329248366
cris-the-dev	х	84.4444444	258	0.3273040482
Code Pillar	11	20.5555556	63	0.3262786596
Omni Potence	11	40.11111111	123	0.3261065944
Onboarding Latam Gamers	12	9.72222222	30	0.3240740741
JYP	12	7.77777778	24	0.3240740741
LAKZONE GAMING GUILD	12	66.72222222	207	0.322329576
SeiEducation Creator Series	12	6.111111111	19	0.3216374269
Tempest Gaming Guild	12	60.2222222	188	0.3203309693
ReikoMigi Arena	12	20.66666667	65	0.3179487179
Ryuzaki	11	11.66666667	37	0.3153153153
FlintCrypto	12	7.77777778	25	0.311111111
AllRichard	12	8.88888889	29	0.30651341
InterBug Al	11	7.333333333	24	0.305555556
Web3Maxx Content	12	10.66666667	35	0.3047619048
thecocox	12	5.166666667	17	0.3039215686
Craig	12	6.666666667	22	0.303030303
Fireant Crypto	12	2.72222222	9	0.3024691358
Kodak	12	6.94444444	23	0.3019323671
Kingjackson Gaming Hub	12	4.22222222	14	0.3015873016
Anas	12	20.11111111	67	0.3001658375
Chain Guide	12	7.5	25	0.3
Nathoi	12	61.16666667	204	0.2998366013

ISEIKAI	12	50.9444444	171	0.2979207277
Resource X	11	18.27777778	62	0.2948028674
AnyaStudios	12	6.44444444	22	0.2929292929
THU FUONG 🔴 💨	12	58.4444444	201	0.2907683803
De~Dentist	12	64.88888889	224	0.2896825397
April Zoe's GameFi Adventure	12	5.5	19	0.2894736842
Yurie's Web3	12	3.166666667	11	0.2878787879
SEI WARRIORS	12	54.11111111	188	0.2878250591
Hermes	12	8.611111111	30	0.287037037
RAGER - ESPARTANS	11	5.44444444	19	0.2865497076
Femifeks	12	43.11111111	151	0.2855040471
Onchain data for Sei Games	12	5.666666667	20	0.2833333333
SKY_GAM3S X SEI GAMING	12	9.833333333	35	0.280952381
Dreyshq	12	8.94444444	32	0.2795138889
billylwy22	12	9.5	34	0.2794117647
SavageStudios	12	3.611111111	13	0.277777778
Tom	12	11.5555556	42	0.2751322751
SeiDash	11	49.5	180	0.275
Wayfinders	12	5.5	20	0.275
Creative EI	12	4.94444444	18	0.274691358
TR0Y	12	11.77777778	43	0.2739018088
Satoci	11	41.33333333	151	0.2737306843
LillyCreator	12	9	33	0.2727272727
Code Node	11	18.16666667	67	0.2711442786
Sei Zero Knowledge/NFT academy	11	4.55555556	17	0.2679738562
Continental's Game Reviews	12	12.0555556	45	0.2679012346
Wheezzy Legend	12	18.11111111	68	0.2663398693
Seile	11	34.27777778	129	0.2657192076
joxiecoxie gaming hour	12	7.888888889	30	0.262962963
Mana Gaming	12	12.5555556	48	0.2615740741

Akash Talks Crypto	12	14.5555556	56	0.2599206349
codesei	11	20	77	0.2597402597
kc.fun	12	27.61111111	108	0.2556584362
Youngsugarcoat	12	4.333333333	17	0.2549019608
Dynamo	12	3.05555556	12	0.2546296296
TungLava	12	15.5	61	0.2540983607
DEVELOPER'S GUILD VIDEOS	11	12.4444444	49	0.253968254
0xbigd	12	12.66666667	50	0.2533333333
Mayortheidol	12	39.88888889	158	0.2524613221
David 🔺 🔴	12	9.5	38	0.25
TechJohn	12	2.5	10	0.25
nbdieu - Sei Network Community Builder	12	41.38888889	166	0.249330656
Echo	11	8.72222222	35	0.2492063492
NOTYOURMATEK WRITES	12	4.22222222	17	0.2483660131
Mubarak	12	4.38888889	18	0.2438271605
Kobe's Sei Journey	12	6.05555556	25	0.242222222
Explained	11	5.55555556	23	0.2415458937
Sei Learn	11	11.2222222	47	0.2387706856
JENGA DAO	11	7.833333333	33	0.2373737374
Slayer	12	7.833333333	33	0.2373737374
sheggzie	11	7.111111111	30	0.237037037
Digital Redcap Chief	12	4.94444444	21	0.2354497354
The Rejects' Clubhouse	12	5.166666667	22	0.2348484848
Getsuga	11	20.5555556	88	0.2335858586
Creative Owls	12	11.44444444	49	0.2335600907
Learn SEI with developers	11	10.4444444	45	0.2320987654
Fernando	12	3.94444444	17	0.2320261438
Mertenszn	12	4.166666667	18	0.2314814815
Seistart V2	11	6.94444444	30	0.2314814815
KRYPTOHUNTA'S HUB	12	24.38888889	106	0.2300838574
Rex	12	13.33333333	58	0.2298850575

Game on sei	12	7.111111111	31	0.229390681
	12	15.5555556	68	0.2287581699
DoubleJay	14	19.00000000	UO	0.2207001099
CaBsCrypto x SEI	12	12.7777778	56	0.2281746032
Makusui's Sei Game Journey	12	4.55555556	20	0.227777778
Wacko	12	5	22	0.2272727273
SEIVerse	12	14.5	64	0.2265625
LEVI OF WEB 3	12	27.38888889	121	0.2263544536
IRA gaming videos	12	30.38888889	135	0.2251028807
DEXTERS GAMING HUB	12	20.44444444	91	0.2246642247
Education in web3 with Rain	12	7.611111111	34	0.2238562092
daevoohpy	11	9.611111111	43	0.2235142119
Heroe	12	13.83333333	62	0.2231182796
Luna	12	5.888888889	27	0.2181069959
Founders Talk on SEI	12	18.66666667	87	0.214559387
Pdthang810	12	18.38888889	86	0.2138242894
The Consortium	11	37.61111111	176	0.2136994949
Chandon - Kids Gaming on SEI	12	18.88888889	89	0.2122347066
Sei Gaming Letter	12	22.88888889	108	0.2119341564
Sei Protector	11	10.9444444	52	0.2104700855
N1ghtStar	12	38.38888889	183	0.2097753491
IREOLAAA	12	7.72222222	37	0.2087087087
donutgrillfish's video marathon for SEI	12	3.111111111	15	0.2074074074
Raphael	12	15.27777778	74	0.2064564565
Djani	12	5.77777778	28	0.2063492063
Trophy david	12	2.888888889	14	0.2063492063
Seifarmers	12	25.5	124	0.2056451613
Moneyshot	12	12.83333333	63	0.2037037037
0xlolu	11	4.666666667	23	0.2028985507
PurgatoryDAO	12	24.66666667	122	0.2021857923
Dashke SEI Show	12	14.5	72	0.2013888889
Lord	12	11.44444444	57	0.2007797271

Shockermandan Games the	40	F4 0444444	050	0.2005577000
System Mbi-tal OFI	12 12	16.83333333	259	0.2005577006
MhiztaLOEL			84	0.2003968254
Viento	12	27.61111111	139	0.1986410871
Hanzoplays	12	27.7777778	140	0.1984126984
Chain link	11	7.72222222	39	0.198005698
Rock of god	12	25.5	129	0.1976744186
degenOn.sei	12	6.111111111	31	0.1971326165
Enissay's application	12	4.72222222	24	0.1967592593
Kyle Willson	12	5.666666667	29	0.1954022989
Vishnu the Greatest	11	8.166666667	42	0.194444444
lfezko	12	10.27777778	53	0.1939203354
Goatfather	12	4.44444444	23	0.193236715
SEINALYTICS	11	44.4444444	231	0.1924001924
Sei Gaming With NoFuturistic	12 12	14.16666667 10.61111111	74 56	0.1914414414
Smart				0.189484127
Kierian	12	22.0555556	117	0.1885090218
Erikooled	12	11.88888889	64	0.1857638889
oneortwo	12	14.0555556	76	0.1849415205
The Sei Newbie Bot	11	16.38888889	89	0.184144819
Token Talk	12	24.66666667	134	0.184079602
Sei Insights with Ben	12	5.5	30	0.1833333333
Sei Nobles - Paul	12	4.388888889	24	0.1828703704
CJ	12	29.2222222	161	0.1815044859
Legendary League	12	11.0555556	61	0.1812386157
GirlGaming	12	18.66666667	103	0.1812297735
CRYPTO BULLS CLUB X SEI	12	30.9444444	171	0.1809616634
Play on Sei	12	31.9444444	177	0.1804770873
Fenton	12	16.9444444	94	0.1802600473
DubiousNFTLover	12	10	56	0.1785714286
Rikki {₿}	12	11.9444444	67	0.1782752902

Bando - Creator Series	12	42	236	0.1779661017
SLGuides Youtube	12	3.72222222	21	0.1772486772
Nonso heard them sei	12	20.05555556	114	0.1759259259
Turtlez	12	14.5	83	0.1746987952
NFTDad.Sei	12	40.9444444	235	0.1742316785
TREK	11	38.16666667	220	0.1734848485
MILLI LightningGun	11	23.38888889	135	0.1732510288
Geauser	11	40.77777778	236	0.172787194
SEI TECH XPLAINED	11	14.72222222	86	0.1711886305
Jake's Gaming on SEI	12	27.83333333	163	0.1707566462
SEILANA	11	12.33333333	73	0.1689497717
Sei Play Hub	12	11.27777778	67	0.1683250415
//zageth	12	13.9444444	83	0.1680053548
de3ngineer	11	16.38888889	98	0.1672335601
Ziko Crypto	11	16.27777778	98	0.1660997732
Code_hive	11	17.0555556	103	0.165587918
Kingball	12	22.11111111	134	0.1650082919
Tauk Ancient OG	12	20.38888889	124	0.1644265233
Let Stew Out Of The Basement	12	14.61111111	89	0.1641697878
2lambro	12	8.33333333	51	0.1633986928
Machiya	12	32.0555556	197	0.1627185561
WisdomDD	12	10.2222222	63	0.1622574956
Mattcrypted	12	9.38888889	58	0.1618773946
DobOnX / Sei Community	12	20.5555556	127	0.1618547682
Midas	11	17.61111111	109	0.1615698267
3phraem	12	13.2222222	83	0.1593038822
Mrs Clare	12	19.5555556	124	0.1577060932
Anastasiia Gonser	12	24.11111111	153	0.1575889615
Jargon	12	29.11111111	186	0.1565113501
Crypto girl	12	23.11111111	148	0.1561561562
Sideyyy Web 3.0 Gaming	12	17.16666667	111	0.1546546547

Raid Rewards For SEI	11	17.7777778	115	0.154589372
Manuelpng	12	15.61111111	101	0.1545654565
danyafobe	12	26.2222222	170	0.154248366
Voltz	12	15.77777778	103	0.1531823085
WeBumpCaptainsDAO	11	13.27777778	87	0.1526181354
Block 24	11	11.88888889	78	0.1524216524
Chinese game community	12	10	66	0.1515151515
(Larp) Gaming with Jay	12	9.166666667	61	0.150273224
Chris D Plays Games	12	10.2222222	69	0.1481481481
Moonlit - SEI lover & Creator	12	10.33333333	70	0.1476190476
Anastasiia - Sei in a simple words	12	18.27777778	124	0.1474014337
decoderdev	11	52.27777778	355	0.1472613459
Dammy	12	9.666666667	66	0.1464646465
Seivians	12	7	48	0.1458333333
DeFiwithDaniel (new)	12	13.1111111	90	0.1456790123
god of iron	12	24	165	0.1454545455
The SEI Gaming Show	12	8.27777778	57	0.1452241715
Katz	11	14.77777778	102	0.1448801743
Seipex Finance	11	44.0555556	305	0.144444444
StarPlatinum	12	16.5	118	0.1398305085
The Qunks	11	17.27777778	125	0.1382222222
Yax Republic	11	14.61111111	106	0.1378406709
SEIYAN PLAY	12	7.5	55	0.1363636364
SEI IT OUT LOUD With Brainy	12	19.05555556	141	0.1351457841
The Unfrgtn	11	24.66666667	183	0.1347905282
SEIlluminati	11	18.5	139	0.1330935252
lost at sei	12	9	69	0.1304347826
Benji 💨 🦲	12	11	87	0.1264367816
Seiyan Trading Bot	11	28.77777778	229	0.1256671519
Crafty Canines	11	34.77777778	277	0.1255515443

Kosa on SEI 💨 🦲	12	37.33333333	298	0.1252796421
0xKyrylo Gaming Content	12	19.88888889	159	0.1250873515
Synergy (BkArchived)	12	16.5555556	147	0.1126228269
Torii Exchange	11	20.9444444	192	0.1090856481
Seiyan Crash Game	12	11.38888889	124	0.09184587814

Observations

The mean ModelScore is: 21.47806
The mean ScorePerDonor is: 0.262236

The Model is not be-all and end-all of the discussion, it's just one of the many general ways one can frame fraudulent activity within these rounds.

A high score is not necessarily a damning judgement, but definitely a recommendation to the powers that be at Gitcoin and Sei that these projects need further looking at.

Some of the worst offenders found in the examples have escaped the top 20 in this scoring method, so it is by no means flawless. However, it does give a good general indicator of suspicious activity across projects that have a high model score.

One other perspective that may be important is looking at the Projects purely from a ModelScore. Here are the top 10 projects presented in descending order of ModelScore:

ProjectName	round_id	ModelScore	DonorCount	ScorePerDonor
jiamigou	12	168.2777778	259	0.6497211497
SeiTalk	11	144.3888889	248	0.5822132616
Marcosei	12	117.8333333	205	0.574796748
SeiGPT	11	107.444444	151	0.7115526122
Digitstak X SEI GAMING	12	97.0555556	148	0.6557807808
cris-the-dev	11	84.4444444	258	0.3273040482
CLOAK	11	76	160	0.475
Seitrace	11	74.88888889	204	0.3671023965
Hanna	12	73.7222222	147	0.5015117158
TheCryptoBlade	12	70.61111111	113	0.6248770895

It is also better not just to take these results at face value, but also to interrogate the data independently. While much attention was paid to ensure the data's accuracy and the model's fairness method, there is obviously lots of room for interpretation and re-analysis with such a detailed dataset.

cris-the-dev

cris-the-dev deserves a special mention from the team for inadvertently providing us with lots of the criteria used to catch activity from bad actors in this report. cris spent an awful lot of time and effort, not only utilising several methods of fraudulent voting, but also in ways to try and disguise this activity and make it appear more organic. cris even contacted a member of the team at various points discussing how he was planning to game the system.

cris is one of the projects we can say with 100% certainly is intentionally rampant with fraudulent activity and unnatural voting behaviour. But we do want to acknowledge that, without his dedication to trying to make fools of Sei, Gitcoin, and all other projects alike, we almost certainly would not have discovered several of the creative and diverse methods outlined in this report and used by other bad actors.



Messages from cris-the-dev to one of the team.

Data Dictionary

This is the data dictionary for the Final ABT - adbr.csv (all data, both rounds).

Variable Name	Туре	Description
Х	chr	A character representation of an identifier for each record
DonorAddress	chr	The EVM address of the donor, identifying the source of the donation.
ProjectName	chr	The name of the project receiving donations.
TotalDonationsCount	int	The total amount of money donated to the project, expressed in \$SEI.
TotalAmountDonatedInUsd	num	The total amount of money donated to the project, expressed in USD.
UniqueDonorsCount	int	The count of unique donors who contributed to the project.
DonationAmount	num	The amount of the individual donation, expressed in \$SEI
DonationAmountUsd	num	The amount of the individual donation expressed in USD.
DonationTimestamp	POSIXct	The date and time when the donation was made, recorded in POSIXct format.
CreatedByAddress	chr	The EVM address of the account that created the Project.
AnchorAddress	chr	The EVM address of the masking address provided by Gitcoin.
DonationHash	chr	The transaction hash for the donation on the blockchain, used for tracking and verification purposes.
SeiHash	chr	A unique identifier for the wallet address on the Sei blockchain.
evm_tx_count	num	The number of transactions made on the Ethereum Virtual Machine (EVM) associated with the donor.
cos_tx_count	int	The number of transactions made on the Cosmos blockchain

		associated with the donor.
nft_count_cos	int	The count of non-fungible tokens (NFTs) owned on the Cosmos blockchain by the donor.
nft_count_evm	int	The count of non-fungible tokens (NFTs) owned on the Ethereum blockchain by the donor.
sei_balance	num	The balance of the donor's account in the Sei blockchain.
delegation_count	int	The number of delegations made by the donor on the associated blockchain.
FunderCos	chr	The Sei address of the funder on of this wallet.
CreatedCos	POSIXct	The date and time when the wallet carried out its first transaction on the Sei Network.
ValueCos	num	The monetary value, expressed in \$SEI, associated with the Cosmos funder.
FunderEvm	chr	The EVM address of the funder of this wallet.
CreatedEvm	POSIXct	The date and time when the wallet was first sent funds via the EVM address, recorded in POSIXct format.
ValueEvm	num	The monetary value, expressed in \$SEI, associated with the EVM funder.
GenesisDate	POSIXct	The date and time when the wallet or account was created, recorded in POSIXct format.
GenesisLocation	chr	The blockchain platform where the wallet was created (e.g., "Cos" or "Evm").
round_id	num	An identifier representing the funding round associated with the donations.
wallet_flag	num	(Defunct column) A flag indicating the status of the wallet, possibly indicating if it is active or inactive (0 or 1).
low_tx_count	num	A count indicating whether the wallet has a transaction count below 10 (0 or 1).

young_wallet	num	A flag indicating if the wallet was created on or after the opening date of the two rounds (0 for no, 1 for yes).
sus_day_wallet	num	A flag indicating if the wallet has been created on 2024-08-29 (0 for no, 1 for yes).
DonationTimestampExact	chr	The exact timestamp of the donation in ISO 8601 format, including time zone information.
lazy_bot	num	A flag indicating if the donor is identified as a "lazy bot" (0 for no, 1 for yes).
prolific_funder	num	A flag indicating if the funder is considered prolific based on if it has funded between 11 and 99 other wallets (0 for no, 1 for yes).
low_balance_wallet	num	A flag indicating if the wallet has a low \$SEI balance, with 1.25 being the threshold (0 for no, 1 for yes).
model_score	num	A score assigned to the wallet or funder based on a predictive model, indicating its potential value or risk.
model_score_count	num	A count indicating the number of flags the wallet has collected.

Team Members

Ark7 - Founder of Trek - https://explorer.gitcoin.co/#/round/1329/11/53
Shisho - Founder of Seipex Finance - https://explorer.gitcoin.co/#/round/1329/11/4
Geauser - Founder of Happy Ape - https://explorer.gitcoin.co/#/round/1329/11/65
Kryme - Founder of Crafty Canines - https://explorer.gitcoin.co/#/round/1329/11/65
Decoderdev - Founder of Massdrop - https://explorer.gitcoin.co/#/round/1329/11/52

Eagle - Found of The Unfrgtn - https://explorer.gitcoin.co/#/round/1329/11/20

Datasets

All datasets can be found at: https://github.com/raicead/creator-fund-report

adbr.csv

adbr.csv (all data, both rounds) is the full analytics dataset for rounds 3 and 4 with wallet flags attached to aid scoring

dodgy_wallets.csv

dodgy_wallets.csv is a list of all wallets with a model_score_count > 2 and a model_score > 0.5. the 0.5 threshold can be considered a "more suspicious than not limit" for inclusion. The score count of 3 or more is there because it's possible for any organic wallet to raise combinations of any 2 flags in the wild, but 3 or more would start to raise suspicion.

We have identified 2,256 wallets which would be considered "worthy of investigation" and in excess of 3,070 which are almost certainly involved in fraudulent behaviour.

dodgy_projects.csv

dodgy_projects.csv is the above data rolled up to a project level. It is recommended to sort this list by descending model score to see the most egregious offenders. A more compelling can be seen by sorting by descending score per donor, many of the same names appear at the top of both, but the score per donor option appears more effective as to our understanding of which projects were being manipulated more intentionally.

This csv also has a round_id filter to allow you to slice between round 3 (11) and round 4 (12)