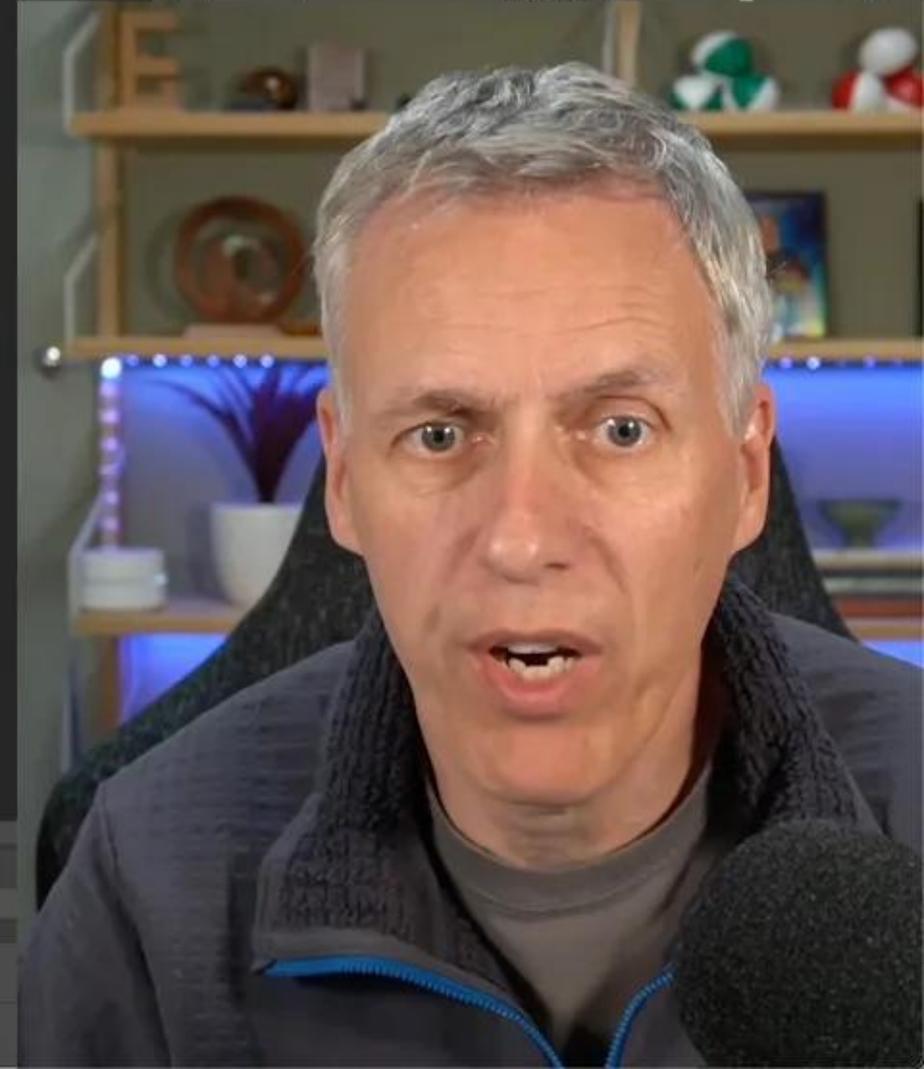Brush Settings

Brushes

Character

Paragraph

136.83%

FAKE

pacific

00   02:00f   04:00f   06:00f   08:00f   10:00f   12:00f   14:00f   16:00f   18:00f   20:00f

> Layer 1

(29.05 fps)

1
00:00:00,640 --> 00:00:06,960
hello so this little video of a dog uh supposedly\h
being rescued from an oncoming train has got kind\h\h

2
00:00:06,960 --> 00:00:12,480
of popular it is a fake video and there's a number\h
of ways we can tell it's fake and i'm going to go\h\h

3
00:00:12,480 --> 00:00:17,120
through them. But you know first of all something\h
uh that's pretty common in fake videos is this\h\h

4
00:00:17,120 --> 00:00:21,680
ridiculously shaky camera i just look at it kind\h
of wobbling all over the place like i don't know\h\h

5
00:00:21,680 --> 00:00:27,120
what's supposed to be going on there. But you know\h
the the way the reason is wobbly is the the camera\h\h

6
00:00:27,120 --> 00:00:32,000
was originally probably done on a tripod so they\h
can composite two shots and then they have to add\h\h

7
00:00:32,000 --> 00:00:38,960
the wobble later and so it ends up looking like\h
this ridiculously uh weirdly wobble sinusoidal\h\h

8
00:00:38,960 --> 00:00:45,920
thing. But yeah there's other reasons we can tell\h
it's fake and it kind of all boils down to shadows\h\h

9
00:00:45,920 --> 00:00:52,640
because this is if we didn't have these shadow\h
clues it would be fairly uh convincing but we do\h\h

10
00:00:52,640 --> 00:00:59,600
and this is something another person pointed out\h
there was let's see this guy here professor farid\h\h

11
00:00:59,600 --> 00:01:04,640
did this shadow analysis showing the directions\h
of the shadow it doesn't seem to match up with the\h\h

12
00:01:04,640 --> 00:01:10,320
guy in the dog now this is actually a little hard\h
to do because there's a a ditch there and so it's\h\h

13
00:01:10,320 --> 00:01:15,920
you did you're not you're not projected onto flat\h
ground so it's a little difficult to get exactly\h\h

14
00:01:15,920 --> 00:01:20,720
the same things but there's a much simpler way\h
of doing it actually much simpler way of showing\h\h

15
00:01:20,720 --> 00:01:28,640
that it's fake now uh the first thing is if we zip\h
back to the start we can see yeah before he does\h\h

16
00:01:28,640 --> 00:01:34,880
this little cut to zoom in that there's this\h
shadow right here which is the shadow of this\h\h

17
00:01:34,880 --> 00:01:41,840
uh some lamp over here now this is a shadow here\h
this is a shadow of a rock that's there so this\h\h

18
00:01:41,840 --> 00:01:46,560
shadow isn't going to move as the sun moves this\h
is a shadow of a lamp and as the sun moves around\h\h

19
00:01:46,560 --> 00:01:54,160
this will move around so i'm just going to let's\h
see i'll just take a little copy of that area for\h\h

20
00:01:54,160 --> 00:02:00,320
now and then let's move forward now you'll see\h
he does this little zoom in here he zooms in to\h\h

21
00:02:00,320 --> 00:02:04,800
see the train coming around the bend but this\h
actually gives him the opportunity to do a cut\h\h

22
00:02:04,800 --> 00:02:11,600
if he didn't do that zoom you would see the shadow\h
pop now if i zoom in again here you will see\h\h

23
00:02:12,160 --> 00:02:17,920
that uh this shadow has moved it's moved in this\h
direction it's moved away so this gap between\h\h

24
00:02:17,920 --> 00:02:26,400
the two is bigger now i can demonstrate that by\h
simply taking the clip i did earlier and create\h\h

25
00:02:26,400 --> 00:02:35,920
a new file and paste in that clip now i'm going\h
to go back and i'm going to go forward to where\h\h

26
00:02:35,920 --> 00:02:42,880
the train is coming around the bend and i'm going\h
to do a similar uh clip around there copy that\h\h

27
00:02:43,600 --> 00:02:53,520
and paste that over the top of this now make the\h
top layer transparent so i can line up the shadow

28
00:02:57,840 --> 00:03:02,160
now we can see if i flip between these two layers\h
the one with the man we see that the shadow is\h\h

29
00:03:02,160 --> 00:03:07,200
close to this rock and the one with the train the\h
shadow is much further away and obviously the sun\h\h

30
00:03:07,200 --> 00:03:12,160
hasn't moved that much in a few seconds so this\h
is two separate shots and that in itself kind\h\h

31
00:03:12,160 --> 00:03:17,600
of debunks it but we may as well keep going and\h
look at what else is going on here another thing\h\h

32
00:03:17,600 --> 00:03:22,000
that's very hard to do with shadows is if you\h
have something casting a shadow then something\h\h

33
00:03:22,000 --> 00:03:27,920
else comes along and obscures that object and\h
the shadow behind it now you've got two shadows\h\h

34
00:03:27,920 --> 00:03:33,120
and if you're trying to composite the actual\h
guy in you've got to kind of remove his shadow\h\h

35
00:03:33,680 --> 00:03:39,440
and this doesn't happen here you'll see that when\h
when we get close when the train gets close to him\h\h

36
00:03:40,160 --> 00:03:47,120
you see he's lying down here and he kind of lifts\h
up his head and you see a shadow underneath so you\h\h

37
00:03:47,120 --> 00:03:52,880
see this little shadow here of his head as you\h
go up problem is that shadow should not exist\h\h

38
00:03:53,440 --> 00:03:59,120
because what we have here is a train obscuring\h
everything now if something's casting a shadow and\h\h

39
00:03:59,120 --> 00:04:04,480
we move something in front of it that obscures\h
the shadow like here i'm moving this uh this\h\h

40
00:04:04,480 --> 00:04:11,920
cardboard here you'll see there is no shadow under\h
this this model's head so that's yet another way\h\h

41
00:04:11,920 --> 00:04:18,000
that we can see that there is there's nothing\h
else going on you can also see that in this\h\h

42
00:04:18,560 --> 00:04:24,960
scene uh we have this shadow here over what looks\h
like a tree or something but when the train comes\h\h

43
00:04:24,960 --> 00:04:30,880
along it's still there you can see the edge of\h
that shadow there which again shouldn't be there\h\h

44
00:04:30,880 --> 00:04:36,320
so we shouldn't have any shadow and i duplicate\h
that here with the shadow of a little table\h\h

45
00:04:36,960 --> 00:04:42,960
when the card comes along no shadow is visible\h
whatsoever no shadow visible here so again that\h\h

46
00:04:42,960 --> 00:04:49,040
shows that it's uh not actually possible now an\h
interesting thing with this particular setup here\h\h

47
00:04:49,040 --> 00:04:55,440
i cut this notch in to simulate the gap between\h
the train cars and you'll see when it goes over\h\h

48
00:04:55,440 --> 00:05:03,200
the guy's head right here you will see that\h
the line does not cut through his head because\h\h

49
00:05:03,200 --> 00:05:09,200
his head is in a different position in fact it\h
comes over a little bit later and you see that\h\h

50
00:05:09,200 --> 00:05:15,280
uh in this if you look at this bush over here you\h
kind of see a similar type of effect you see the\h\h

51
00:05:15,280 --> 00:05:23,040
uh line there but the the bit of the bush that's\h
illuminated pops into at a different angle and\h\h

52
00:05:23,040 --> 00:05:28,240
you see this uh throughout the the background here\h
you see there's gonna bits of grass pop in and out\h\h

53
00:05:29,040 --> 00:05:34,000
then when it comes to his head you'll see that\h
the line actually goes straight through his head\h\h

54
00:05:34,000 --> 00:05:36,560
which it shouldn't actually do\h
it should actually be kind of\h\h

55
00:05:37,520 --> 00:05:42,880
on one side or the other depending on the angle\h
of the sun and again you can see this shadow here\h\h

56
00:05:44,000 --> 00:05:49,280
and the shadow is still there so it's\h
fake about uh four different ways\h\h

57
00:05:51,280 --> 00:05:56,480
it's a a reasonably well done video though\h
another thing you can notice actually is\h\h

58
00:05:56,480 --> 00:06:01,920
that when you zoom into this area here when\h
the train's kind of getting close you notice\h\h

59
00:06:01,920 --> 00:06:07,360
everything around here get all kind of fuzzy\h
and blurry and kind of dark before the train\h\h

60
00:06:07,360 --> 00:06:12,160
even gets there and i think that's just because\h
they had to kind of blur things out because there\h\h

61
00:06:12,160 --> 00:06:17,840
was so much going on shadows are tricky you want\h
to shoot these these fake things on an overcast\h\h