

The background is black and decorated with several blue dots and circles of varying sizes, scattered across the frame.

YouTopia

Giving kids the ideal YouTube Experience

Nitya Mandyam

79% of kids under age 7

in the USA regularly watch YouTube

3 out of the top 10

YouTube channels are kids' channels

10% of all YouTube views

come from kids' content

Children's YouTube is still churning out blood, suicide and cannibalism

Children's search terms on YouTube are still awash with bizarre and sometimes disturbing bootleg content. Can anything be done to stem the tide?

By **K.G ORPHANIDES**

23 Mar 2018

GOOGLE

YouTube's Creepy Kid Problem Was Worse Than We Thought



Adam Clark Estes

11/28/17 9:33am • Filed to: OUR GARBAGE INTERNET



303.6K



483



10



THE VERGE

CULTURE

REPORT

YOUTUBE

What makes YouTube's surreal kids' videos so creepy?

By **Adi Robertson** | @thedextrarchy | Nov 21, 2017, 1:01pm EST

Technology

Ban Sought in U.S. for YouTube Ads 'Masquerading' as Kids' Shows

By [Todd Shields](#)

October 21, 2016, 12:01 AM EDT

YouTube pulls ads on 2 million inappropriate children's videos

It's also investigating autocomplete search after suggestions for child exploitation content

HOME > DIGITAL > NEWS

SEPTEMBER 13, 2018 10:41AM PT

YouTube Kids App Now Lets Parents Handpick All Videos and Channels

By [TODD SPANGLER](#)



NYT, Guardian, BBC, etc. start reporting on disturbing content in YouTube kids' videos



YouTube Kids App update allows only human-curated content



Nov 2017

Dec 2017

April 2018

Sept 2018

YouTube responds!

- ❑ 50 channels terminated
- ❑ 1000's of videos removed
- ❑ Ads removed from 500,000 videos

YouTopia

INSIGHT

YouTopia is created as part of an Insight Data Science Project

YouTopia:

**A NLP-based ~~YouTube~~
Content Filter**

Peppa Pig





How Peppa Pig became a video nightmare for children

James Bridle's essay on disturbing YouTube content aimed at children went viral last year. Has the problem gone away - or is it getting worse?

James Bridle

Sun 17 Jun 2018 03:00 EDT

Can we train a classifier to catch the “shady” Peppa Pig videos?

- Text Data from a 1000 Peppa Pig videos
- Obtained using the YouTube API



Tony Kid



Transcript

00:03 evil t-rex is breathing fire George pig
00:10 and blue t-rex have come to put out
the
00:13 fire with their special powers
00:16 it's not working they need backup her
00:23 comes a firetruck to help
00:31 Oh deal if George got too close to the
00:35 fire George needs some medicine and
English (auto-generated)

Up next

AUTOPLAY



Peppa Pig English
Episodes | Peppa Pig...
Peppa Pig - Official Ch
17M views



Peppa Pig English
Episodes in 4K |...
Peppa Pig - Official Ch
24M views



Peppa Pig English Full
Episodes Compilation...
Peppa Pig English
4.6M views



PEPPA PIG gets a new
toy House in this Kids...

peppa pig english episode #Peppa Pig Crying Compilation #Peppa Pig Doctor, spiderman, Truck #pepp

4,140 views

7 5 SHARE SAVE ...



peppa pig english episodes

Published on Oct 21, 2016

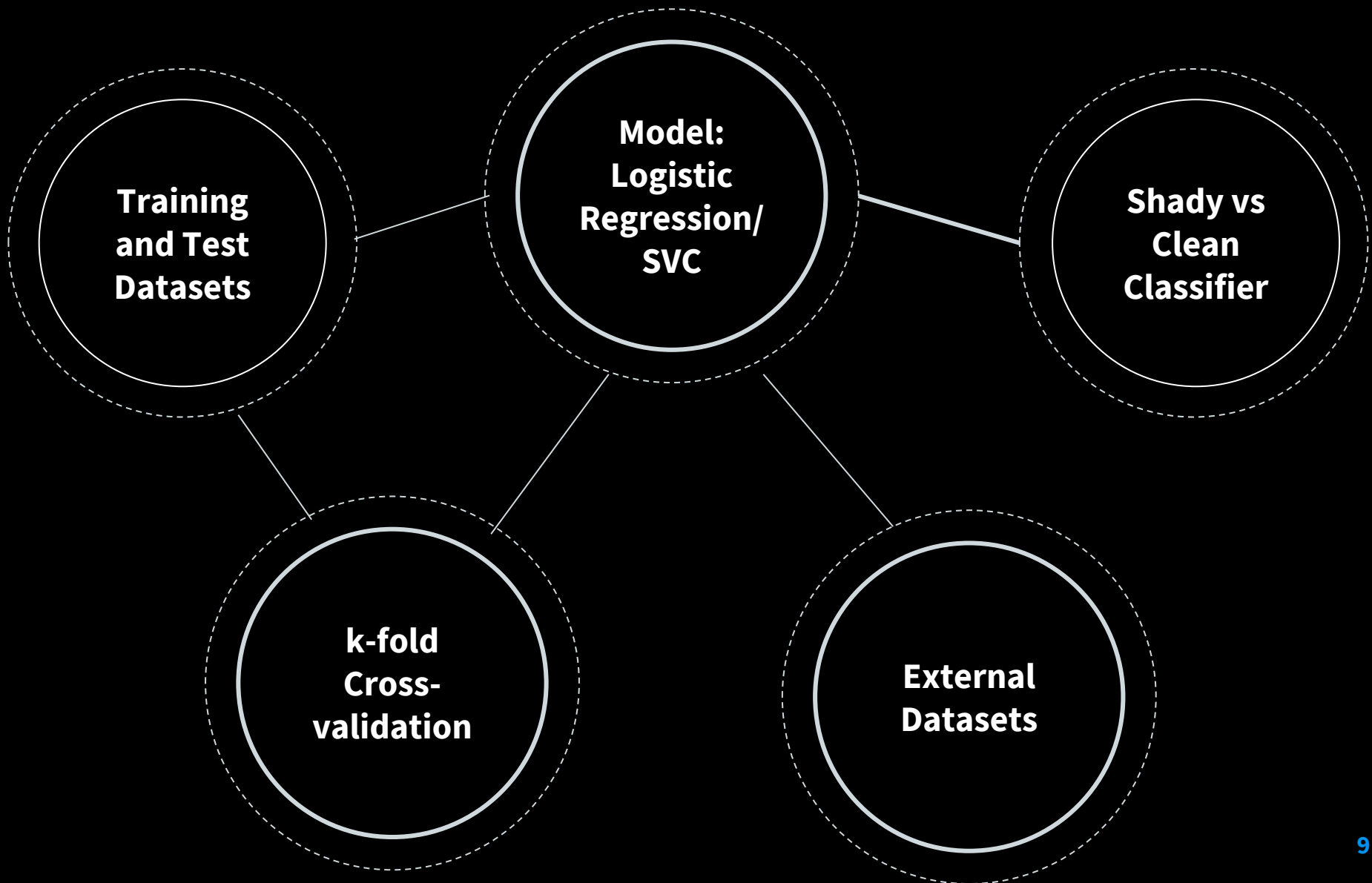
peppa pig english episode #Peppa Pig Crying Compilation #Peppa Pig

Doctor, spiderman, Truck #pepp.

SHOW MORE

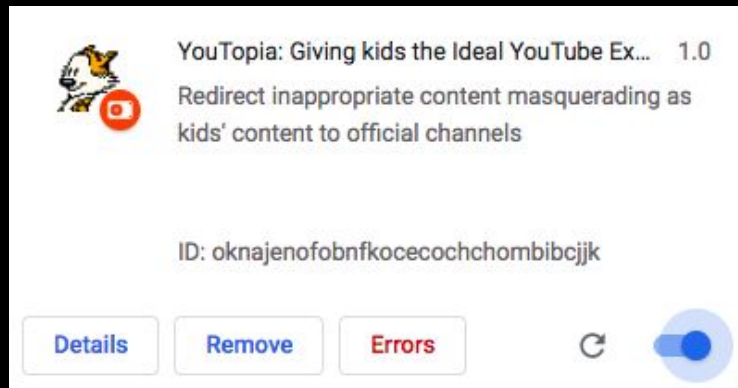
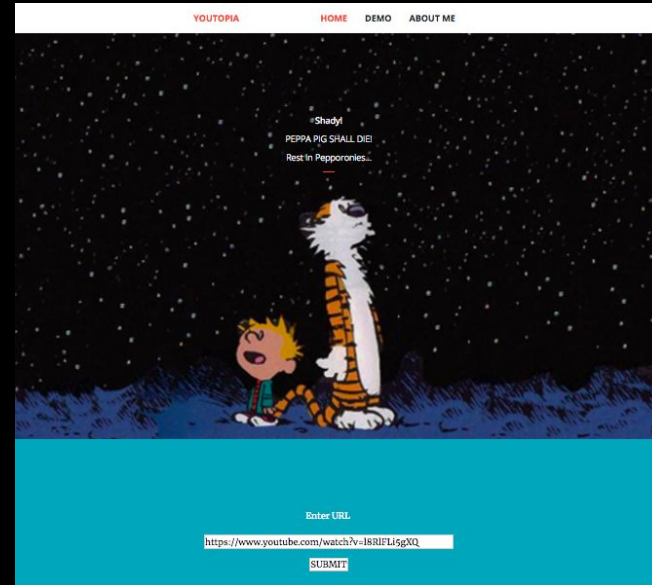
SUBSCRIBE 33

A NLP-based classifier using Word2Vec

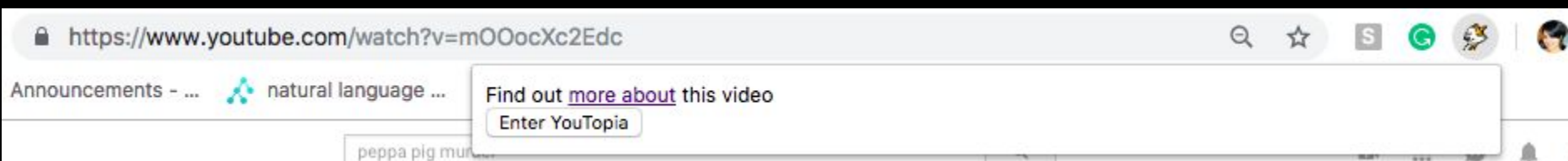


Front End

Web App built using Flask
hosted on an AWS EC2
instance



Chrome Extension to
redirect an
inappropriate video to
the official channel



youtopia.site

YOUTOPIA

HOME

DEMO

ABOUT ME

YouTopia

Giving kids the ideal YouTube experience

TRY IT!



Enter URL

SUBMIT

About Me

Hi there! I'm Nitya. Boo!

I am currently a fellow at Insight Data Science.

INSIGHT



GitHub



LinkedIn

Sample Input!



PEPPA PIG SHALL DIE!

139 views

1 0 SHARE SAVE ...



LionCrash

Published on Nov 29, 2015

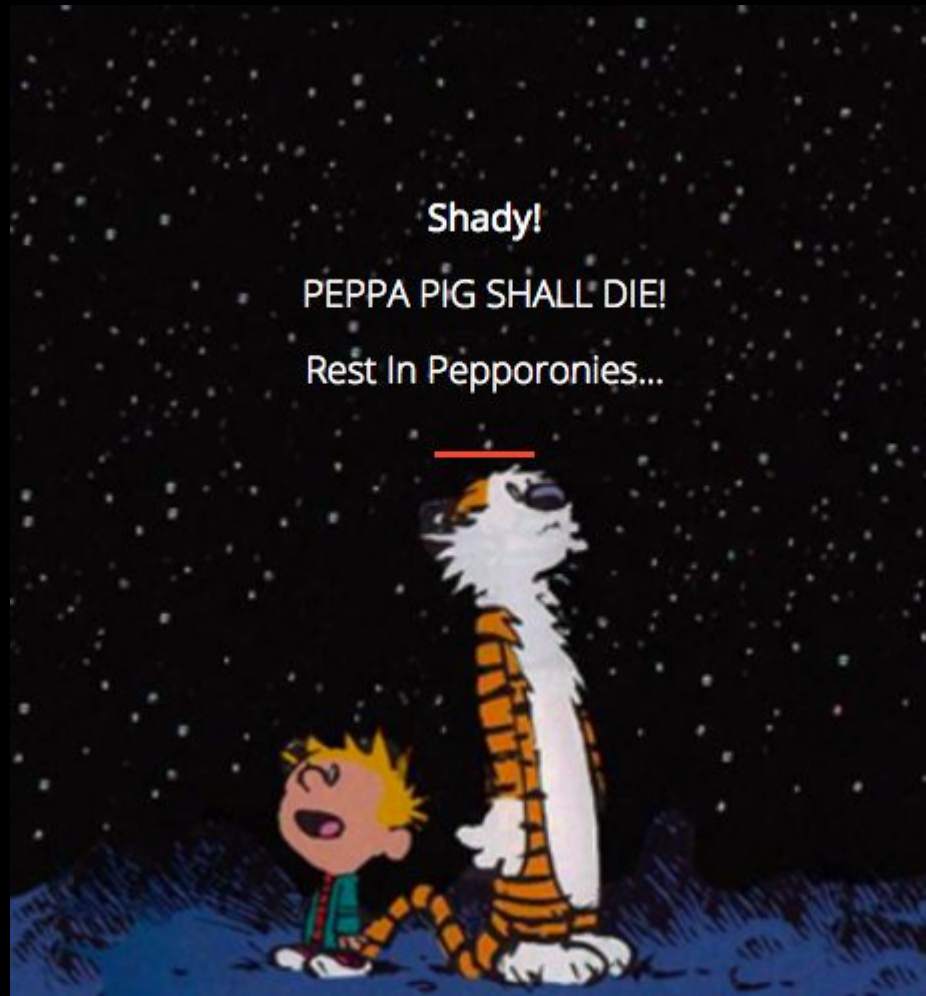
Rest In Pepporonies...

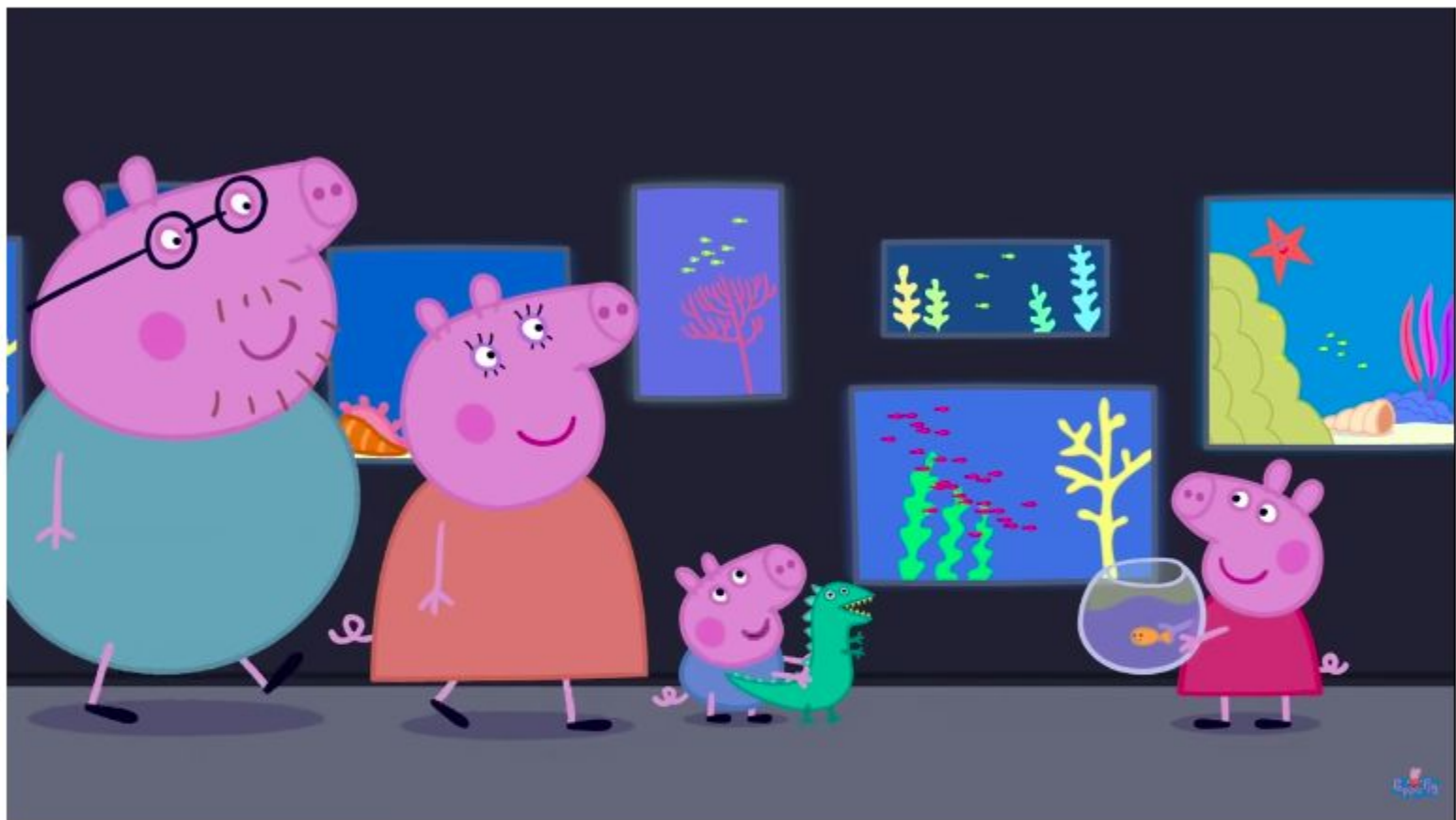
Category [Entertainment](#)

SHOW LESS

SUBSCRIBE 111

Sample Output!





#PeppaPig #PeppaPigEnglish #PeppaPigOfficial

Peppa Pig English Episodes | Peppa Pig visits the Aquarium | Peppa Pig Official

1,251,448 views

👍 2.9K 💬 1.4K ➦ SHARE 📌 SAVE ...



Peppa Pig - Official Channel

Published on Oct 8, 2018

SUBSCRIBE 6.1M

Peppa Pig English Episodes | Peppa Pig goes to the Aquarium | Peppa Pig Official

Clean!

Peppa Pig English Episodes | Peppa Pig visits the Aquarium | Peppa Pig Official

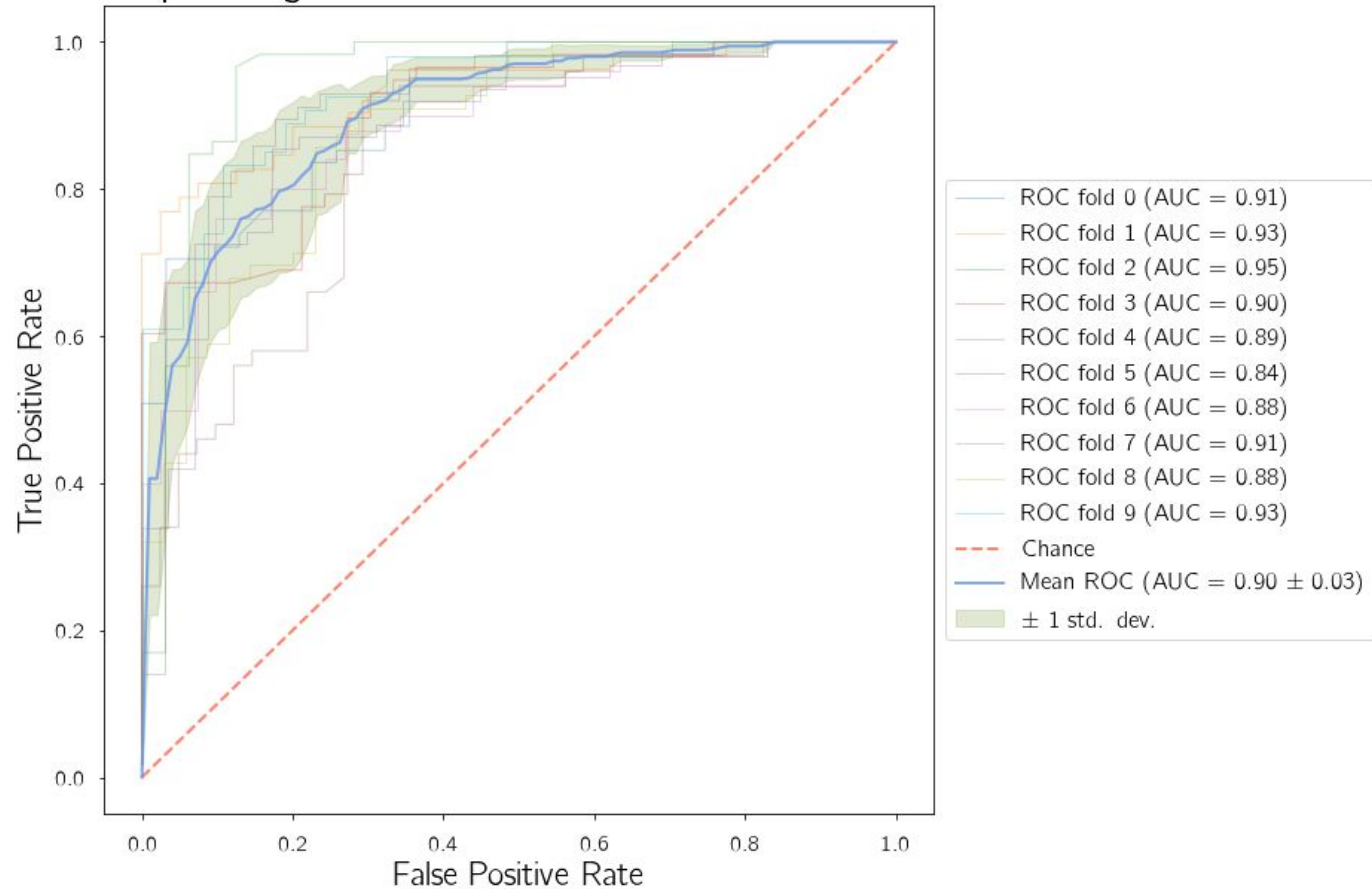
Peppa Pig English Episodes | Peppa Pig goes to the Aquarium | Peppa Pig Official ☆

Subscribe for more videos: <http://bit.ly/PeppaPigYT> #PeppaPig #PeppaPigEnglish

#PeppaPigOfficial Welcome to the Official Peppa Pig channel and the home of Peppa on YouTube! We have created a world of Peppa with episodes and compilations to keep even the most dedicated Peppa fans happy. Enjoy and don't forget to subscribe. Peppa is a loveable, cheeky little piggy who lives with her little brother George, Mummy Pig and Daddy Pig. Peppa's favourite things include playing games, dressing up, days out and jumping in muddy puddles. Her adventures always end happily with loud snorts of laughter. ☆ Watch the latest uploads here! <http://bit.ly/PeppaPigNewVideos> ☆ Watch Peppa Pig's most Popular

Average Accuracy:
82.8%

Receiver operating characteristic with k-fold Cross-validation



Average f1 score:
0.826

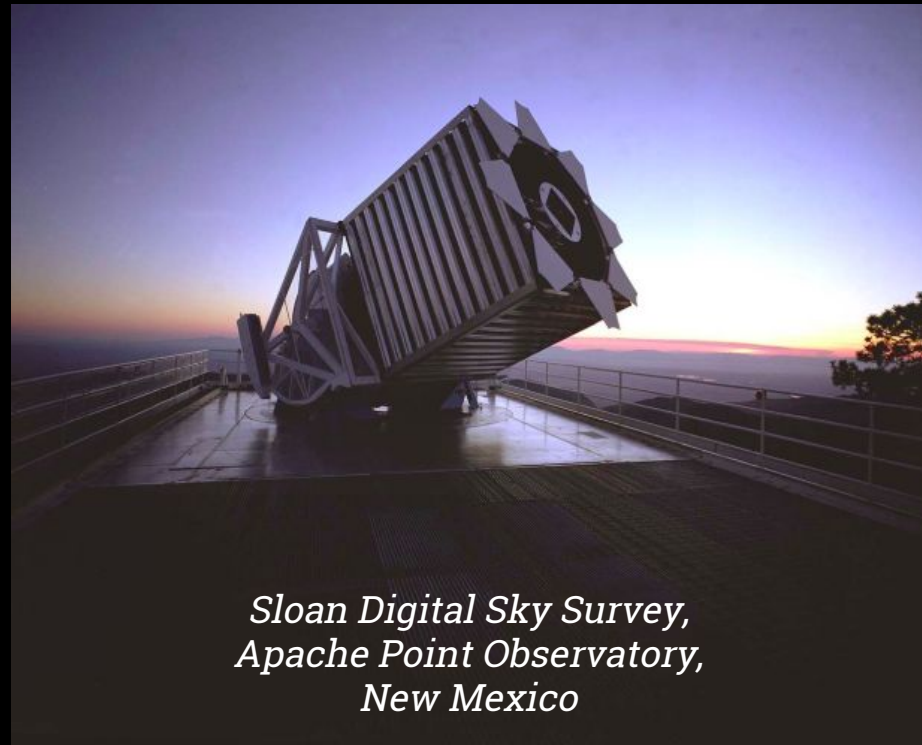
Moving forward

- © Chrome Extension
- © Crowdsourcing the labelling process
- © Personalized reports: email summaries to parents

Nitya Mandyam

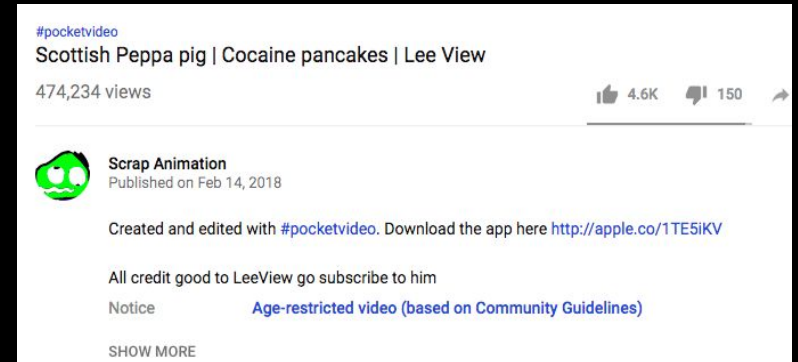
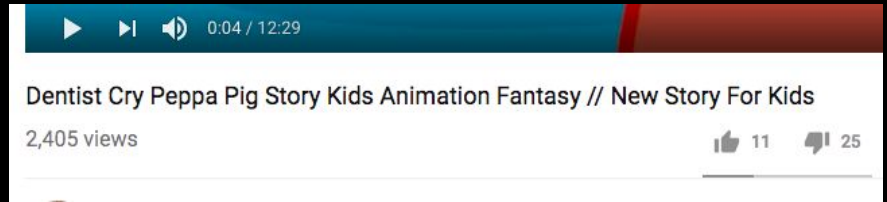
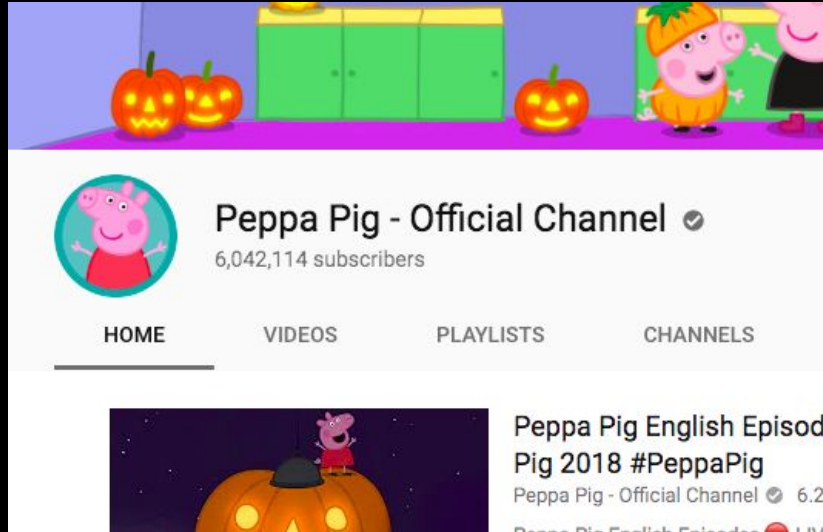


INSIGHT



*Sloan Digital Sky Survey,
Apache Point Observatory,
New Mexico*

Backup Slides



21	21	38	peppa pig sparta remix is stupid	iCjNcjyJ06w	Description	1.0
22	22	30	Peppa Pig is not very well	hRw9-H8MiPA		1.0
23	23	142	Temporada 3x04 Peppa Pig La Biblioteca Español	klxmRbtXLgY	Papá Pig tiene un libro de la biblioteca que s...	0.0
24	24	4	Peppa Pig English Episodes Peppa Pig goes sw...	w-mAkUWuvCE	Peppa Pig English Episodes Swimming #Peppa...	0.0
25	25	195	peppa pig-Daddy Puts up a Picture	m4rMVkLhtOs		1.0
26	26	183	Peppa pig MLG peppa goes to the dentist	NgKjRmUEV7A	Like and subscribe for more	1.0
27	27	96	Peppa Pig & Minnie Mouse Unboxing: Kitchen Toy...	GEXCLq3DZ5o	Peppa Pig & Minnie Mouse Unboxing: Kitchen Toy...	0.0

Demo

Clean:

<https://www.youtube.com/watch?v=W9JbqgenXUE>

Disturbing:

<https://www.youtube.com/watch?v=KiGtiPTdCbc>

Weird:

https://www.youtube.com/watch?v=xKrHFhv8r_w