From "Hello You Tubers!" to Nearly 6 mio Views

Andreas Spiess

Who am I?

- 61 year old engineer (ETH)
- Family man
- My own boss
- Interested in many things
- Determined

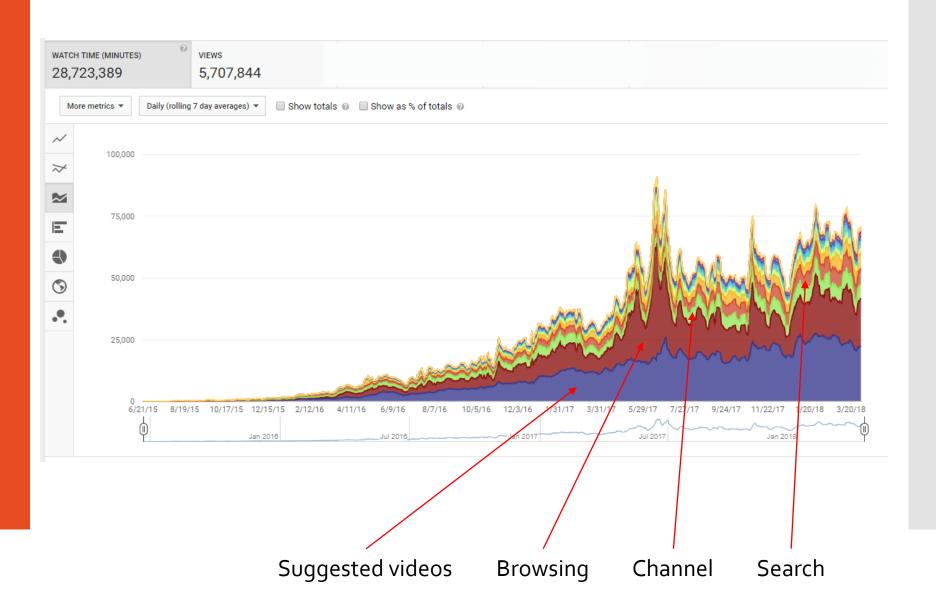
How did I become interested in YouTube?

- My first project: An FM sender
- My hobby: Amateur radio
- My first project I earned money with: Morse trainer for the Swiss Army
- Afterwards: Family and jobs
- About 4 years ago: Arduino. I learned a lot using YouTube videos
- Digitalization: Hands-On experience

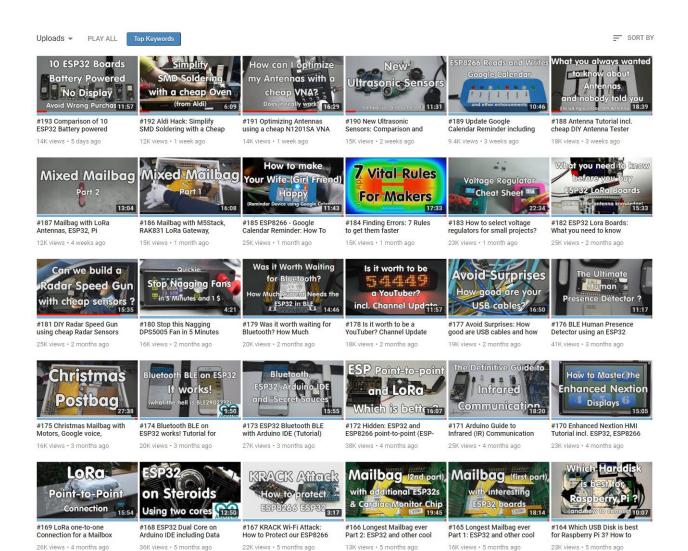
The first 100 Subscribers

- Most important decision: The language
- First video: Self adapting morse trainer (!)
- The henn and egg problem: Passive or active
- Afterwards: Hard work, keep a rhythm

How did it continue?



Currently: 193 videos





Which countries?

Subscribers lost @	Subscribers gained @	Subscribers 🔞 🗸	Geography
735	11,989	11,254	United States
406	6,519	6,113	Germany
274	4,466	4,192	United Kingdom
199	4,277	4,078	India
172	2,699	2,527	Netherlands
131	2,276	2,145	Australia
104	2,239	2,135	Canada
75	1,836	1,761	Brazil
84	1,599	1,515	Sweden
99	1,585	1,486	France
77	1,467	1,390	Switzerland
70	1,395	1,325	Spain
57	1,301	1,244	Poland
70	1,282	1,212	Italy
65	1,037	972	Denmark
60	955	895	Turkey
46	923	877	Belgium
29			
29	835	806	Portugal
31	835	806 771	Portugal Norway
31	802	771	Norway
31 45	802 795	771 750	Norway Austria
31 45 25	802 795 753	771 750 728	Norway Austria Romania
31 45 25 35	802 795 753 757	771 750 728 722	Norway Austria Romania Thailand

Last summer

Geography	Watch time (minutes) 🚱	Views ⊗ ↓	YouTube Red watch time (minutes)	YouTube Red views @	Average view duration @
Falkland Islands (Islas Mal	2 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	2:21
Gambia	1 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	0:30
Comoros	0 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	0:04
North Korea	11 (0.0%)	1 (0.0%)	0 (0.0%)	0 (0.0%)	11:12
				H 4 2	226-229 of 229

Today

	V /	\ /	V /	\ /	
North Korea	17 (0.0%)	3 (0.0%)	0 (0.0%)	0 (0.0%)	5:45
American Samoa	16 (0.0%)	6 (0.0%)	0 (0.0%)	0 (0.0%)	2:38
					of 234 🕨 🕪

Search

0



#151 Mailbag (with a Swiss Atomic Bomb Shelter Tour)

12.015 views











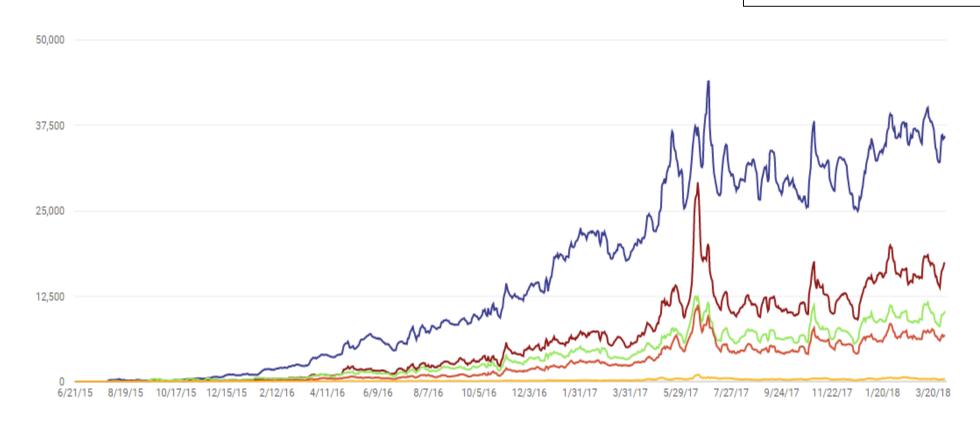


Video	Watch time (minutes) $ \oslash ullet$	Views 🕜	YouTube Red watch time (minutes)	YouTube Red views 🕢	Average view duration @
#135 Radar Sensors / Switches: Comparison a	1,250,887 (4.4%)	204,111 (3.6%)	33,965 (5.1%)	4,765 (4.3%)	6:07
#112 LoRa / LoRaWAN De-Mystified / Tutorial	1,054,738 (3.7%)	137,806 (2.4%)	24,779 (3.7%)	2,809 (2.5%)	7:39
#056 Inexpensive Intelligent Touch Displays fo	950,138 (3.3%)	230,337 (4.0%)	14,355 (2.1%)	2,905 (2.6%)	4:07
#140 IKEA Tradfri IOT Smart Lighting System	868,957 (3.0%)	166,666 (2.9%)	16,219 (2.4%)	2,731 (2.5%)	5:12
#58 ESP8266 Sensor runs 17 days on a coin c	831,127 (2.9%)	182,262 (3.2%)	16,742 (2.5%)	2,962 (2.7%)	4:33
#103 ESP32 Tutorial / Arduino IDE / Tests / Co	599,996 (2.1%)	98,749 (1.7%)	13,659 (2.0%)	1,897 (1.7%)	6:04
#147 Introduction into ESP32 with first tests: P	484,742 (1.7%)	85,386 (1.5%)	13,261 (2.0%)	2,087 (1.9%)	5:40
#59 Nextion Display Tutorial #2: Create your o	469,074 (1.6%)	98,042 (1.7%)	5,928 (0.9%)	1,039 (0.9%)	4:47
#143 Huge Mailbag with ESP32 boards, capaci	407,806 (1.4%)	37,061 (0.6%)	11,894 (1.8%)	995 (0.9%)	11:00
#118 LoRa / LoraWAN: How far does it really r	393,528 (1.4%)	42,795 (0.7%)	12,247 (1.8%)	1,207 (1.1%)	9:11
#142 Solar Power for the ESP8266, Arduino, etc.	352,425 (1.2%)	53,499 (0.9%)	9,228 (1.4%)	1,304 (1.2%)	6:35
#64 What is the Ideal Battery Technology to Po	324,562 (1.1%)	75,725 (1.3%)	7,399 (1.1%)	1,520 (1.4%)	4:17
#100 Soldering Irons Comparison and Test: TS	317,147 (1.1%)	31,310 (0.5%)	9,357 (1.4%)	895 (0.8%)	10:07
#091 How to properly power the ESP8266 mod	313,097 (1.1%)	62,388 (1.1%)	7,911 (1.2%)	1,371 (1.2%)	5:01
#66 New Killer Module from Al-Thinkers? The	307,994 (1.1%)	65,297 (1.1%)	6,235 (0.9%)	1,134 (1.0%)	4:43
#153 A Cheap Intelligent, and Connected Powe	303,144 (1.1%)	54,996 (1.0%)	9,101 (1.4%)	1,522 (1.4%)	5:30
#51 New Arduino/Genuino MKR1000: First tes	291,032 (1.0%)	58,680 (1.0%)	5,239 (0.8%)	981 (0.9%)	4:57
#93 Remote Motion Detector Using a Hacked	287,958 (1.0%)	76,698 (1.3%)	6,190 (0.9%)	1,428 (1.3%)	3:45
#120 LoRa / LoRaWAN Range World Record At	284,972 (1.0%)	38,335 (0.7%)	7,024 (1.0%)	804 (0.7%)	7:26
#172 Hidden: ESP32 and ESP8266 point-to-poi	275,909 (1.0%)	38,360 (0.7%)	9,332 (1.4%)	1,222 (1.1%)	7:11
#115 How to build a LoRa / LoraWAN Gateway	273,074 (1.0%)	63,143 (1.1%)	6,176 (0.9%)	1,189 (1.1%)	4:19
#46 PCB Milling with a Chinese CNC 6040 and	266,556 (0.9%)	59,629 (1.0%)	4,062 (0.6%)	777 (0.7%)	4:28
#159 Big ESP32 Boards Review and Test	257,447 (0.9%)	33,128 (0.6%)	7,897 (1.2%)	922 (0.8%)	7:46
#22 Comparison of precision between Neo-M8	255,013 (0.9%)	80,627 (1.4%)	3,283 (0.5%)	875 (0.8%)	3:09
#128 Node-Red Tricks for Home Automation (253,335 (0.9%)	48,286 (0.8%)	6,991 (1.0%)	1,196 (1.1%)	5:14

Average 53 viewers are watching

4/3/18

- Computer: 35,939 (24 days 22 hours)
- Mobile phone: 17,402 (12 days 2 hours)
- Tablet: 10,299 (7 days 3 hours)
- TV: 6,739 (4 days 16 hours)
- Game console: 325 (5 hours 25 minutes)



45% Computers

Likes

Country	Likes	Dislikes	Views	Likes (%)
New Zealand	1872	6	36'065	5.2%
Brazil	5745	51	124'753	4.6%
Australia	7613	48	166'466	4.6%
Switzerland	4770	98	110'650	4.3%
United Kingdom	16095	171	374'756	4.3%
Canada	7100	79	172'475	4.1%
Austria	2971	22	73'360	4.0%
United States	34971	322	883'278	4.0%
Sweden	5556	62	140'889	3.9%
Denmark	3667	55	93'159	3.9%
Belgium	3159	21	83'055	3.8%
Portugal	2418	23	64'453	3.8%
South Africa	1592	18	45'397	3.5%
Finland	1917	24	55'172	3.5%
Spain	4279	33	128'002	3.3%
Romania	2346	24	70'949	3.3%
Netherlands	8709	90	267'895	3.3%
Germany	20232	299	623'847	3.2%
Italy	4121	45	134'533	3.1%
Norway	1912	16	62'704	3.0%
Russia	1939	27	65'279	3.0%
France	4596	46	155'991	2.9%
Czechia	1844	19	65'625	2.8%
Poland	3849	74	137'941	2.8%
India	4649	57	245'590	1.9%

Comments

Video		Comments 🕝 🗸	
#178 Is it worth to be a YouTuber? Cha	nnel Up	528	
#135 Radar Sensors / Switches: Comp	arison a	299	
#101 Long lasting DIY "Amazon Dash B	utton" u	268	
#120 LoRa / LoRaWAN Range World Re	cord At	255	
#112 LoRa / LoRaWAN De-Mystified / 1	utorial	234	
#58 ESP8266 Sensor runs 17 days on a	coin c	195	
#187 Mailbag with LoRa Antennas, ESF	32, Pi	188	
#126 Cheap MQTT Broker on Raspberr	¿Zero	184	
#142 Solar Power for the ESP8266, Ard	uino, etc.	182	
#056 Inexpensive Intelligent Touch Dis	plays fo	173	
#143 Huge Mailbag with ESP32 boards	, capaci	171	
#168 ESP32 Dual Core on Arduino IDE	ncludin	171	
#039 SN-28B Chinese Crimper vs Engir	eer PA	168	
#103 ESP32 Tutorial / Arduino IDE / Te	sts / Co	162	
#186 Mailbag with M5Stack, RAK831 L	oRa Gat	159	
#185 ESP8266 - Google Calendar Remi	nder: H	159	
#147 Introduction into ESP32 with first	tests: P	149	
#102 Mailbag #8 ESP32,Python, LoRa	intenna	142	
#176 BLE Human Presence Detector us		130	
#181 DIY Radar Speed Gun using	#178 Is it worth to be a YouTuber? Channel Update	130	
#188 Antenna Tutorial incl. cheap	18,051 views	128	
#172 Hidden: ESP32 and ESP8260	Andreas Spiess	126	
#79 GPRS/GSM and GPS in one cl	Published on Jan 13, 2018 In summer 2015 I decided to change from a passive YouTube viewer to the role of an active		
#131 Pimp my Raspberry: Automa			
#159 Big ESP32 Boards Review ar	YouTube creator. Since then I learned a lot. Some things I believe are interesting for you if you think about starting your channel, but most of it is also interesting, maybe even important for viewers. SHOW MORE		

SOCIAL



engagement rate			
99.4%	like ratio		
3,049	YouTube Likes		
18	YouTube Dislikes		
1,121	YouTube Comments		
98	yt shares		
4,188	YouTube Engagements		

Dislikes and Trolls

- Each video gets dislikes
- Different types of trolls

Dislikes

Country	Likes	Dislikes	Views	Dislikes (%)
Switzerland	4770	98	110'650	0.09%
Denmark	3667	55	93'159	0.06%
Poland	3849	74	137'941	0.05%
Germany	20232	299	623'847	0.05%
Canada	7100	79	172'475	0.05%
United Kingdom	16095	171	374'756	0.05%
Sweden	5556	62	140'889	0.04%
Finland	1917	24	55'172	0.04%
Russia	1939	27	65'279	0.04%
Brazil	5745	51	124'753	0.04%
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Portugal	2418	23	64'453	0.04%
Romania	2346	24	70'949	0.03%
Netherlands	8709	90	267'895	0.03%
Italy	4121	45	134'533	0.03%
Austria	2971	22	73'360	0.03%
France	4596	46	155'991	0.03%
Czechia	1844	19	65'625	0.03%
Australia	7613	48	166'466	0.03%
Spain	4279	33	128'002	0.03%
Norway	1912	16	62'704	0.03%
Belgium	3159	21	83'055	0.03%
India	4649	57	245'590	0.02%
New Zealand	1872	6	36'065	0.02%

How is a video created?

- Script: Simple, short, understandable
 - Writ it up
 - Put it down for one night
 - Shorten it
- Record Voice-Over
- Create Powerpoints/ photos/ shoot videos
- Cutting
- Update Github/ Instructables/ Homepage
- Upload / Description/ Links
- In total: 10 hours work for a 15 minutes video

Is this the whole work?

- Content: You have to know your topic
 - Many of my viewers are engineers
- Projects
 - It has to work before you can show it
- Stay up-to-date
 - Subscribed to around 200 YouTube channels
 - Subscriber input
 - Twitter and other sources
- Comments
 - Daily routine: Answer comments and help others

What is my equipment to create Youtube videos?

- Small Lab with lots of light
- Camera: Sony NEX-VG20 (HD)
- Old Fuji camera with macro
- PC with editing software: Power Director
- Audio: Blue Yeti and Rode Link (wireless) microphones, Audacity for recording
- Lab Tour: Video #88

The «Secret Sauce»: YouTube's Algorithm

- Creator's goal: Get on the «Suggested videos» pages
- Google's goal: To keep viewers on their platform as long as possible to sell ads
- Criteria they might use:
 - Views per hour
 - Watch time
 - Views / views per hour
 - Likes
 - Comments

Google: Being found

- Keywords, titel, and description
- Links from other platforms
 - Instructables
 - Twitter
 - Facebook
 - (Instagram)
 - My Homepage
- Become an «authority» for a topic

Title / Picture:

Where do you press next?

Recommended



SOLAR Plane V3 Long Duration Test Flight -

rctestflight 15K views • 22 hours ago



TSP Short #14 - Teardown & Repair of a Fluke PM6685R

The Signal Path 3.2K views • 12 hours ago



NaviPack LiDAR Navigation Module

Hot Crowdfunded Gadgets 15K views • 9 months ago



RC Airplane Made of FOOD (with William Osman)

PeterSripol 131K views • 1 day ago



New Drones From DJI -Updates and Innovations -

Drone Valley 19K views • 1 day ago



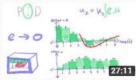
megavalanche challenger 2015 1 of 2

rlagamba 3K views • 2 years ago



DIY Music Reactive "Rings of Saturn" LED Pendant Light

Modustrial Maker 61K views • 3 weeks ago



EEVacademy #6 - PID Controllers Explained



Rockin' out with a Waveshare e-Paper display

David Watts 3.9K views • 5 days ago



Machining at Home: Crazy Accurate Desktop Mill

Innovative CNC 53K views • 1 year ago



Megavalanche 2011 Top Race (Part 1 of 4)

rchewdy 1.1M views • 6 years ago



How To Colour Grade DJI Mavic/Phantom Drone Video

Drone Film Guide 45K views • 5 months ago



New Products 8/30/17

Adafruit Industries ♥ 12K views • 2 days ago



3D Print Durability in Robot Combat (the Chronicles of

Maker's Muse ♥ 21K views • 18 hours ago



How do antennas work?

RCModelReviews 12K views • 4 days ago



Solar Panel High Efficiency (part 2)

BookProX 68K views • 5 years ago



60 HOUR PRINT !! on the Original PRUSA i3 Mk2 Multi

Richard Clements 12K views • 3 weeks ago



Snag Windows Passwords W/Pi Zero

Seytonic 12K views • 1 day ago

Hackaday











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ABOUT

April 9, 2018



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6, 2018

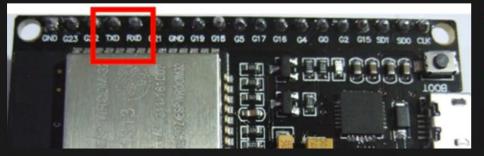
SECRET SERIAL PORT FOR ARDUINO/ESP32

by: Al Williams



46 Comments

August 17, 2017



If you use the Arduino IDE to program the ESP32, you might be interested in [Andreas Spiess'] latest video (see below). In it, he shows an example of using all three ESP32 UARTs from an Arduino program. He calls the third port "secret" although that's really a misnomer. However, it does require a quick patch to the Arduino library to make it

Just gaining access to the additional UARTs isn't hard. You simply use one of the additional serial port objects available. However, enabling UART 1 causes the ESP32 to crash! The reason is that by default, UART 1 uses the same pins as the ESP32 flash memory.



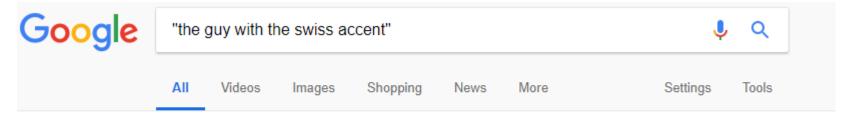
TEXAS INSTRUMENTS





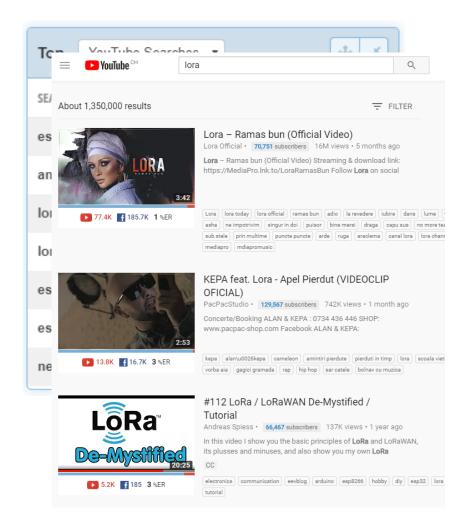
Branding

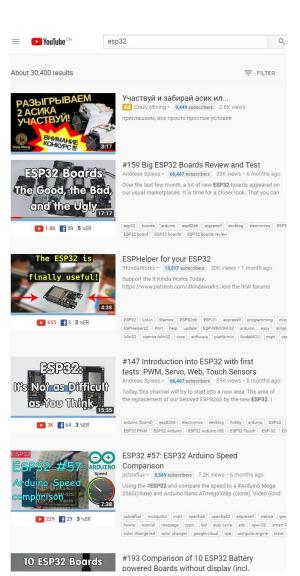
- "The guy with the Swiss Accent"
- The white Gloves



About 1.850 results (0,45 seconds)

Topic Leadership

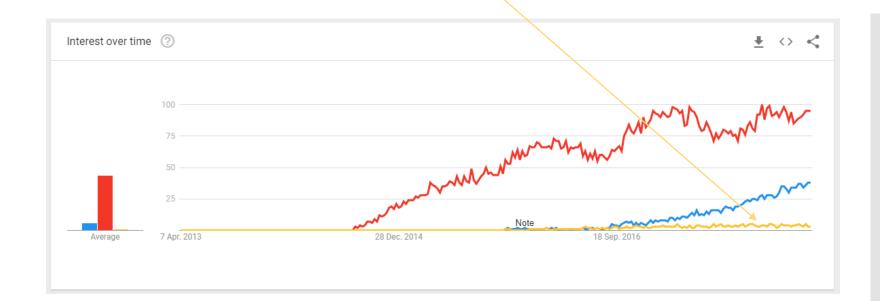




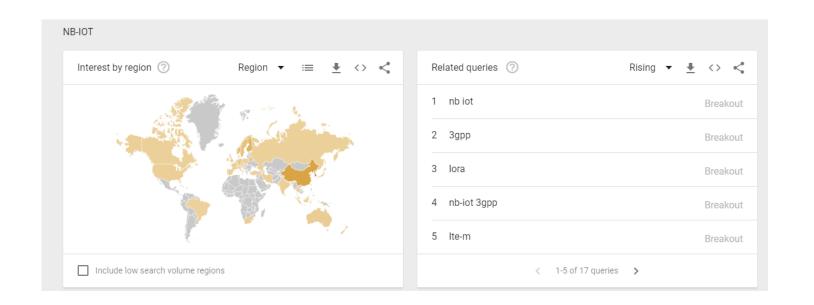
Current Topics



Future Topics



NB-IOT



What do I get from being a Youtuber?

- Fame and Honor
- Money
 - Patreon
 - YouTube
 - Affiliate Links
- Learnings
- Contacts to like-minded people
 - Today' meeting
 - Meetups
 - Journey to the Black Sea
- Speaker/Consulting jobs?

What is the future of the Channel?



GOAL DATE	TIME UNTIL	•SUBS PREDICTION•	VIEWS PREDICTION
2018-05-06	29 days	70,000	6,074,940
2018-06-05	59 days	75,000	6,543,313
2018-06-30	84 days	80,000	6,994,433
2018-08-13	128 days	90,000	7,922,672
2018-09-20	166 days	100,000	8,862,139

2021-09-30 1272 days 1,000,000 92,162,096

Summarized

- Continuity
- Focus
- Quality
- Community (answer comments)
- Title and title picture
- · Hackster.io etc.
- Current and popular topics
- Content has to be compatible with small devices

if (useful or interesting) then Like

