



Let's talk Privacy

Gurugram Police Cyber Cell Internship 2020

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Sharad Agarwal

Research Scientist @ CERN

Incoming Information Security Postgrad @ UCL, London

Bachelor's in Computer Science and Engineering from VIT University



Previously:

Cyber Security Intern @ Gurugram Police Cyber Cell

Openlab Summer Student @ CERN OpenLab

Trainee/intern @ CERN Computer Security Team

Special Achievements:

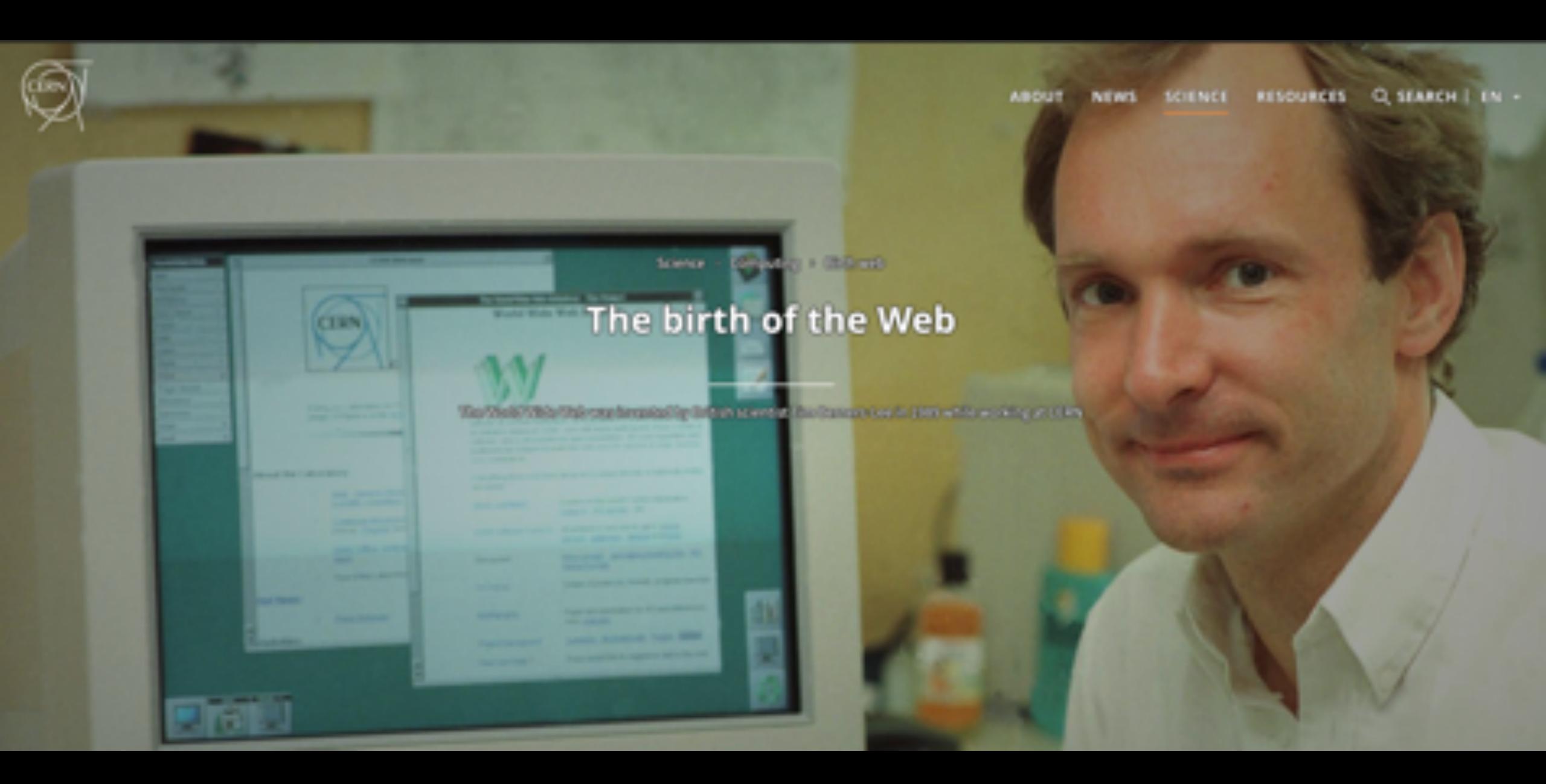
BlackHat Academic Scholarship 2019

Research Papers in Cyber Security:

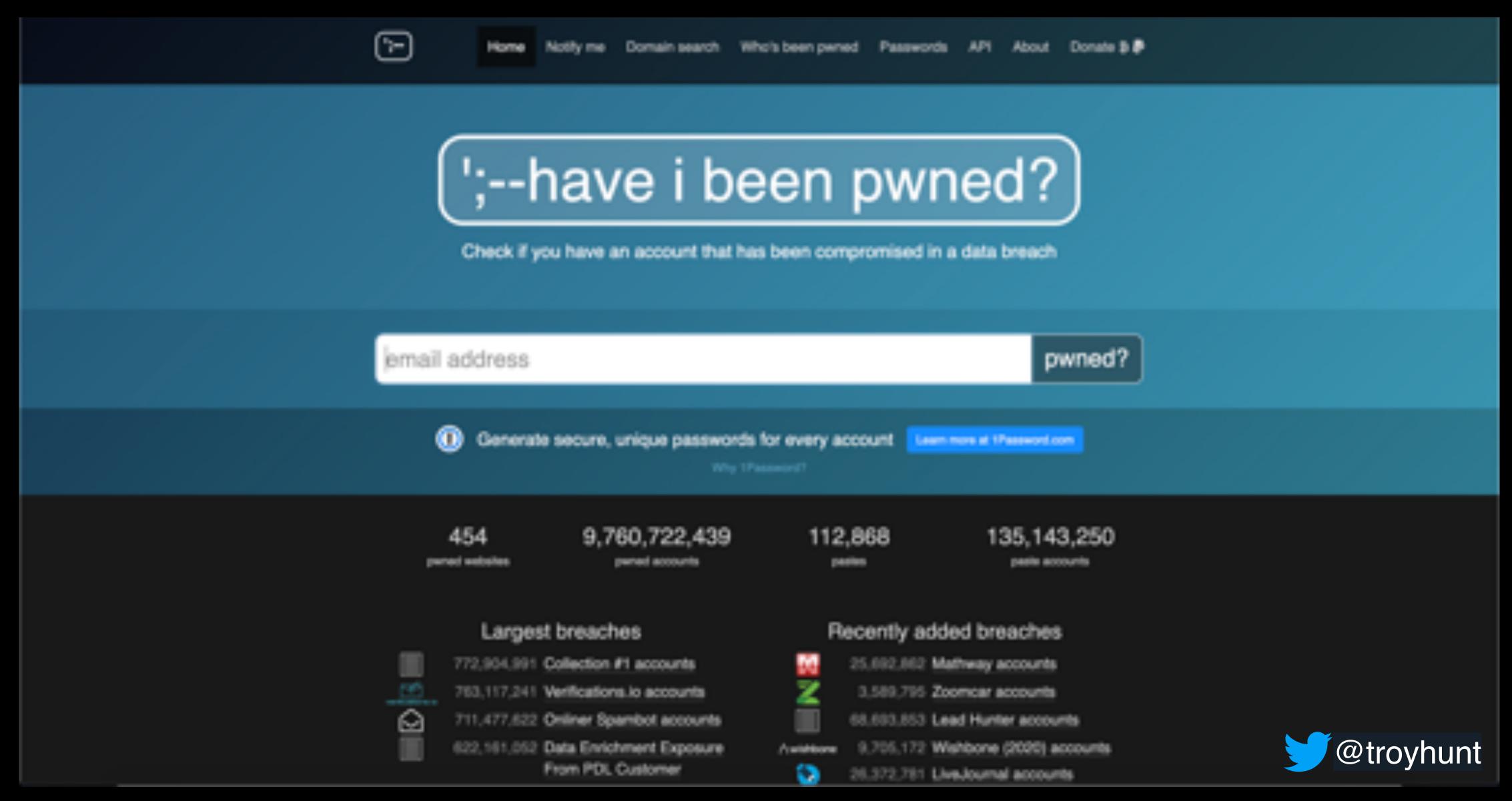
- Agarwal, S.; Oser, P.; Lueders, S. Detecting IoT Devices and How They Put Large Heterogeneous Networks at Security Risk. Sensors 2019, 19, 4107.
- Agarwal, Sharad, Oser, Pascal, Short, Hannah, & Lueders, Stefan. (2017, October 23). Internet of Things (IoT) security. Zenodo. http://doi.org/10.5281/zenodo.1035034
- Agarwal, Sharad, Oser, Pascal, Lueders, Stefan. (2018, June 12) Computer security: Smile, you're on camera...

Various Talks and other research papers ...

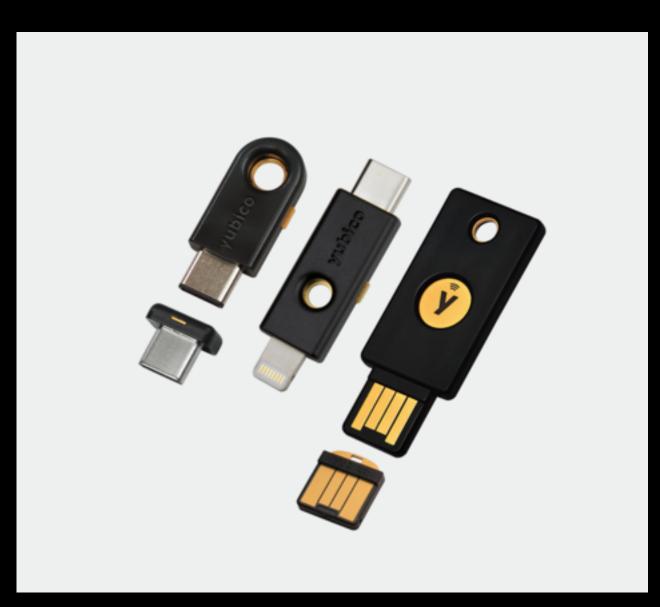
https://sharad1126.github.io/



https://haveibeenpwned.com/



2 Factor Authentication



https://www.yubico.com/products/



https://play.google.com/store/apps/details?id=com.google.android.apps.authenticator2&hl=en



https://cloud.google.com/titan-security-key



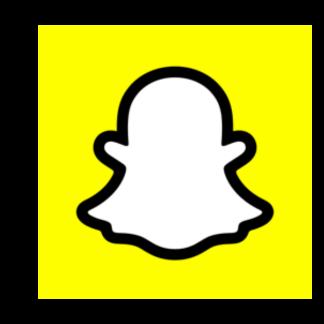
And many more ...

Applications that allows 2FA

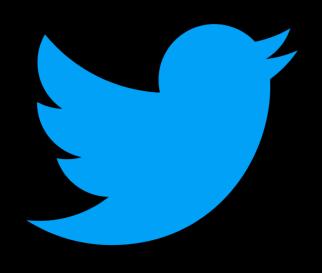














And almost all others too

Open Source Intelligence - OSINT









Preparing the ground for the attack:

- Identifying the victim(s).
- Gathering background information.
- Selecting attack method(s).

Closing the interaction, ideally without arousing suspicion:

- Removing all traces of malware.
- Covering tracks.
- Bringing the charade to a natural end.



Deceiving the victim(s) to gain a foothold:

- Engaging the target.
- Spinning a story.
- Taking control of the interaction.

Obtaining the information over a period of time:

- Expanding foothold.
- Executing the attack.
- Disrupting business or/and siphoning data.

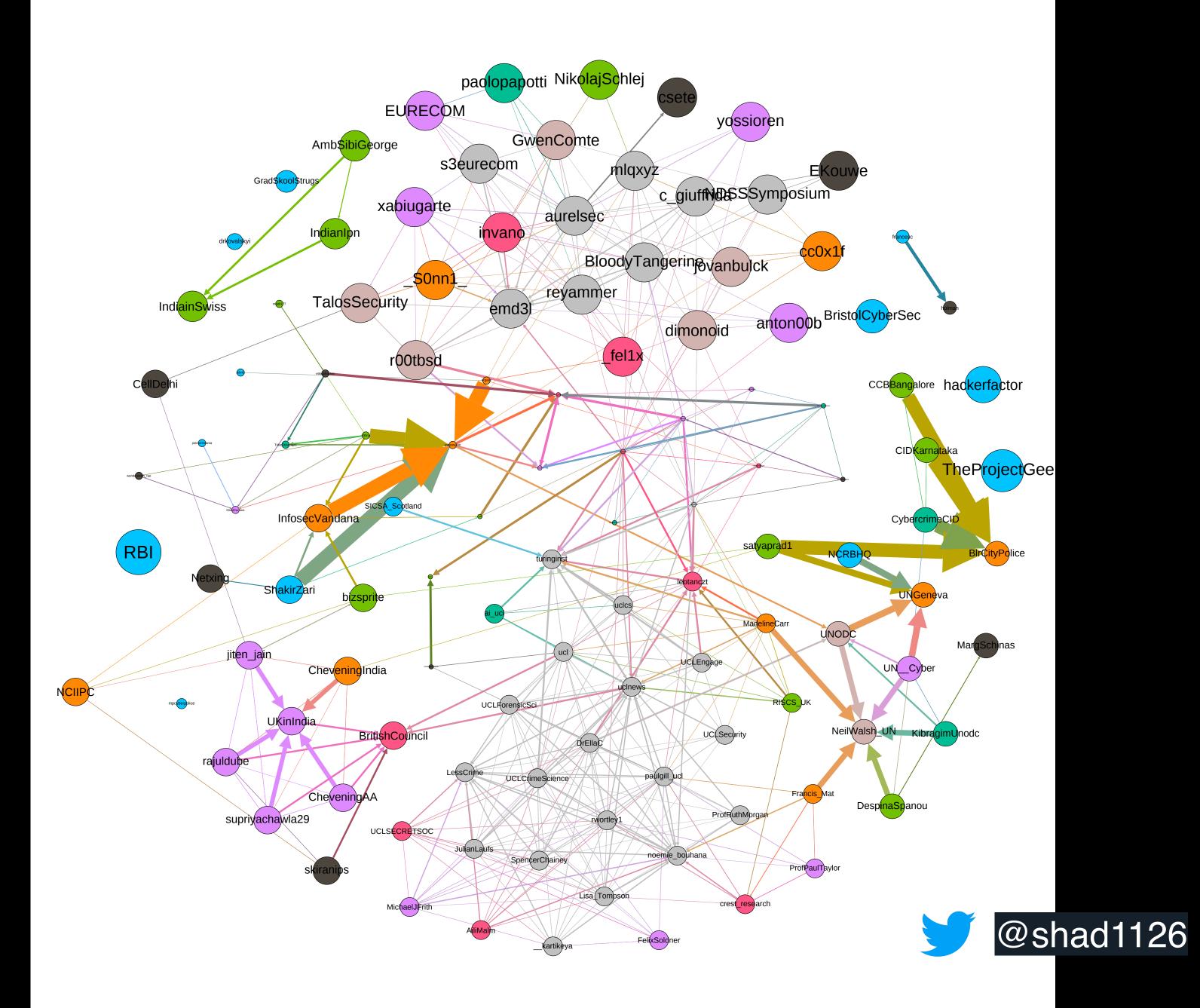
How to use Social Media for Good?

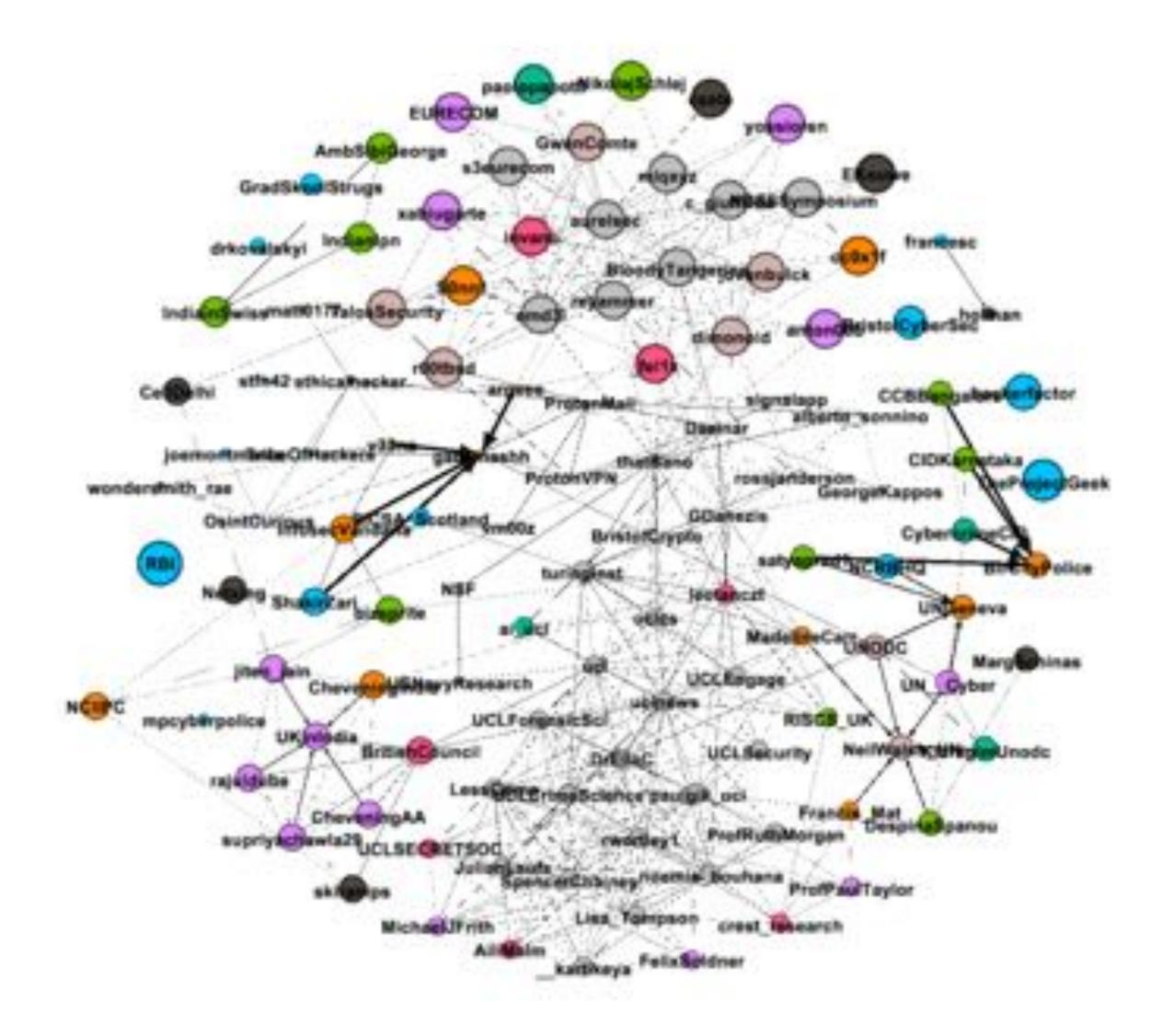


facebook for developers

And other social media platforms too...

Demo Time!







Secure Alternative to Gmail



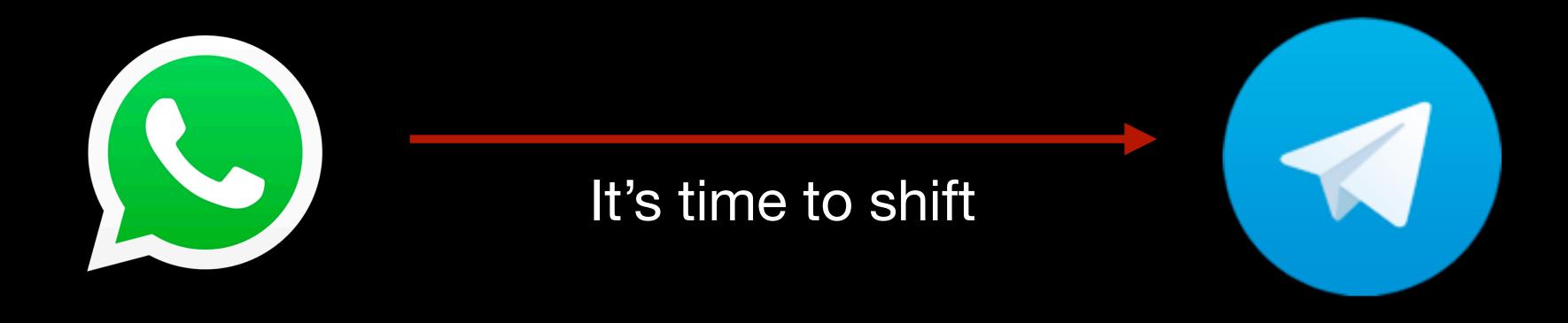




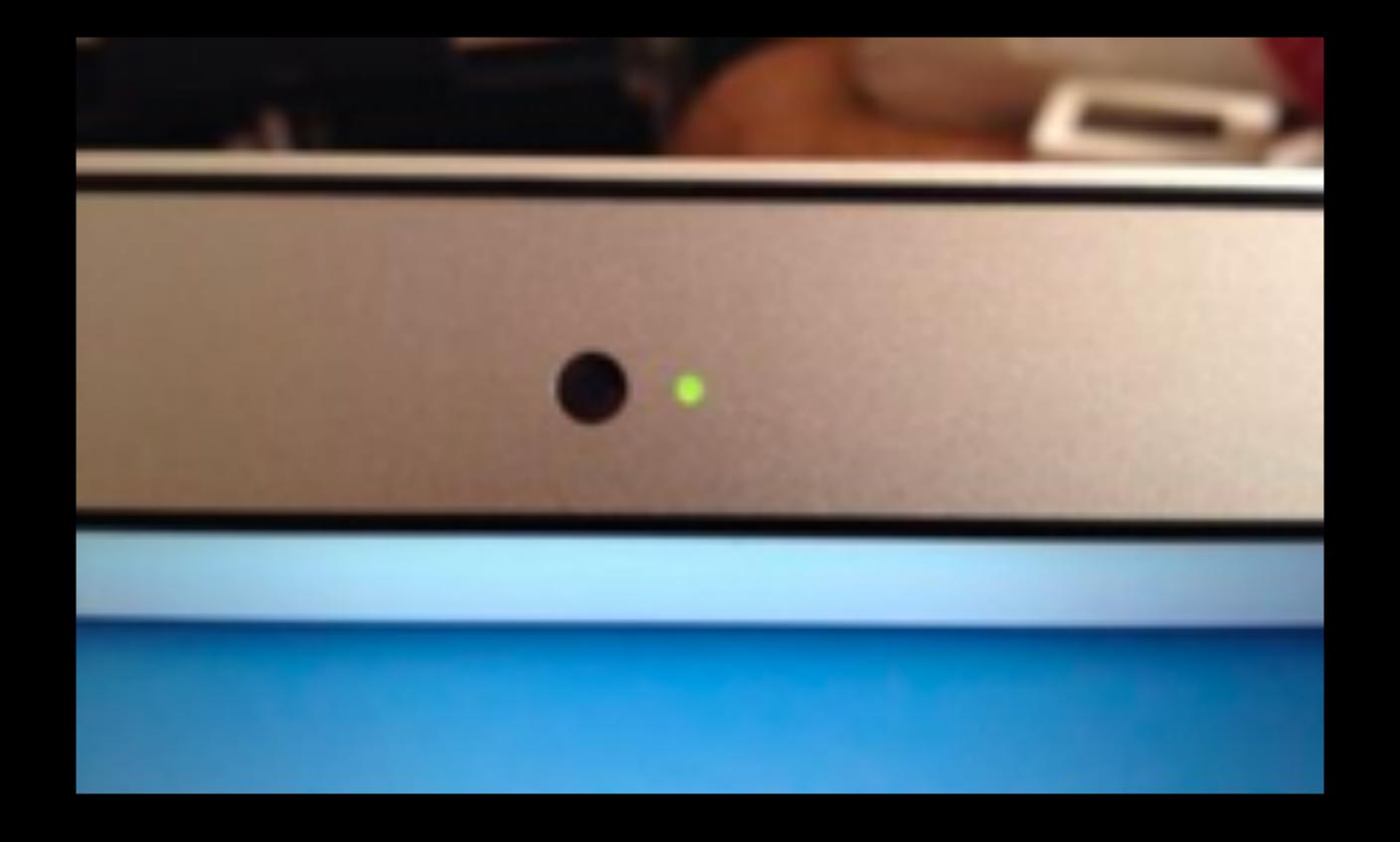


https://protonmail.com/security-details

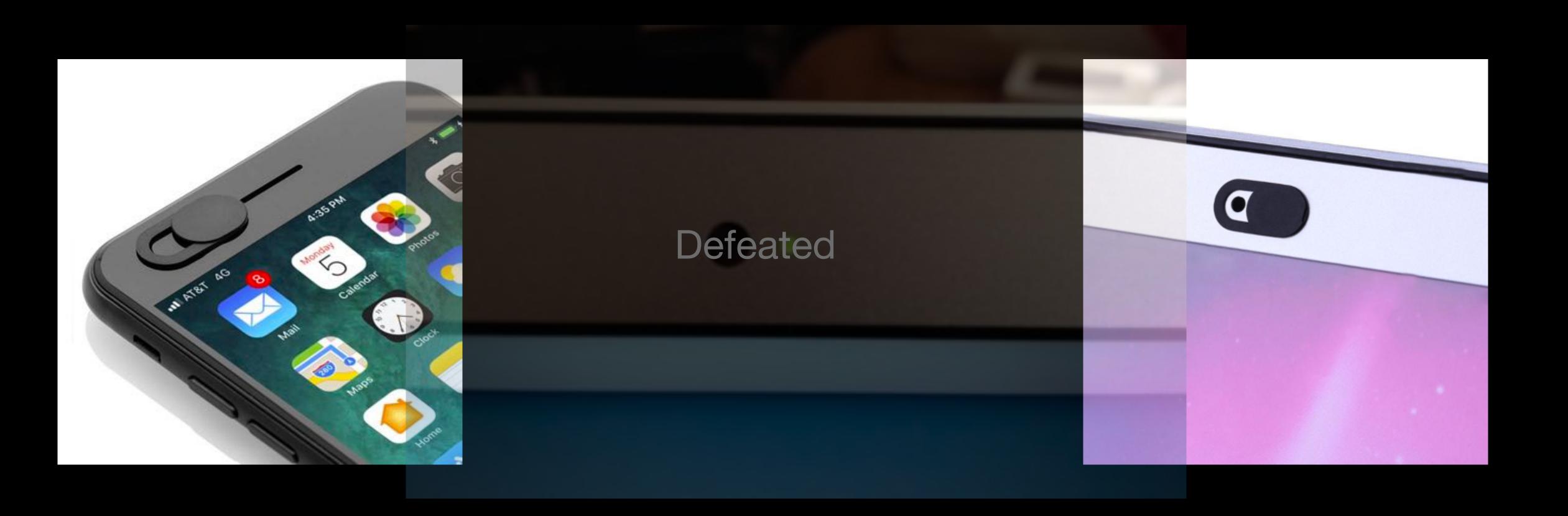
Is WhatsApp really end to end encrypted?



Webcams



Cover Your Webcams



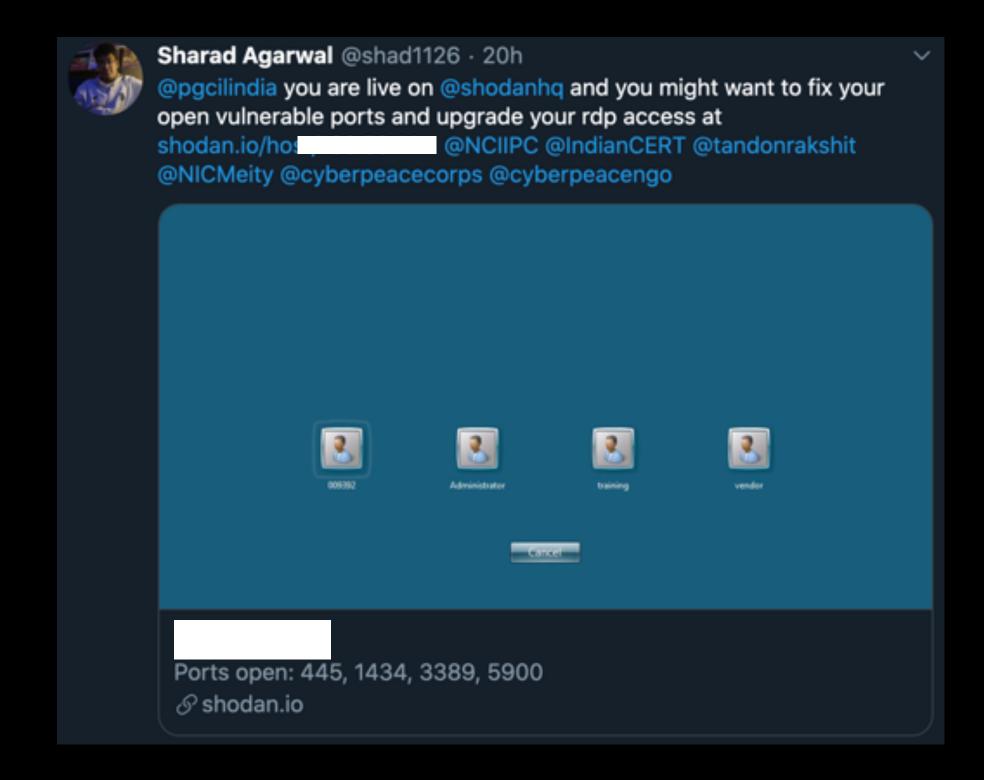


Why are we talking about Shodan

Country	India
Organization	Power Grid Corporation of India Limited
ISP	Power Grid Corporation of India Limited
Last Update	2020-06-06T10:42:29.098439
ASN	AS132215

Microsoft SQL Server Version: 12.0.2000.8

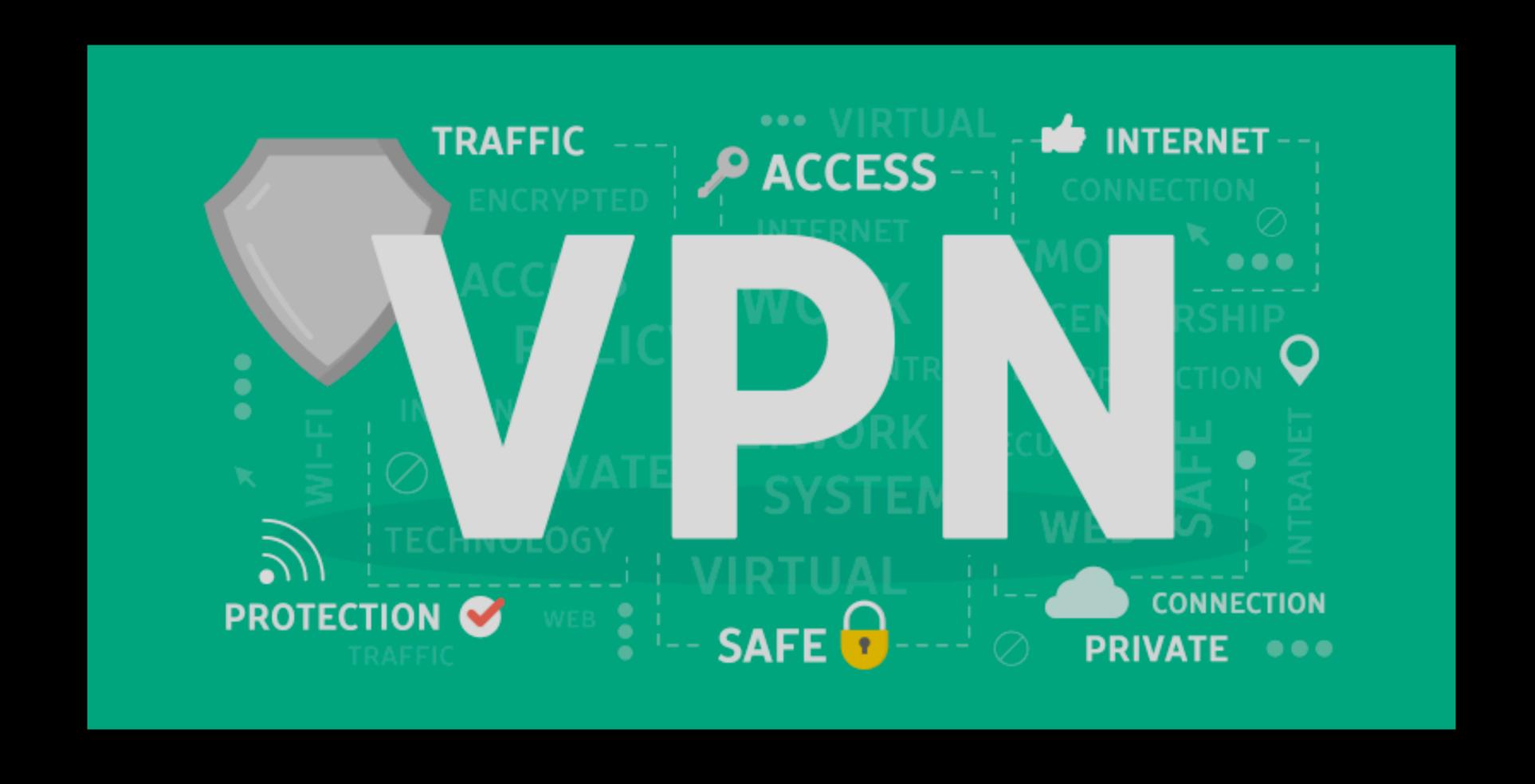
}ServerName;CCTV-BACKUP;InstanceName;MSSQLSERVER;IsClustered;No;Version;12.0.2000.8;tcp;1433;np;\\CCTV-BACKUP\pip e\sql\query;;



https://www.torproject.org/download/

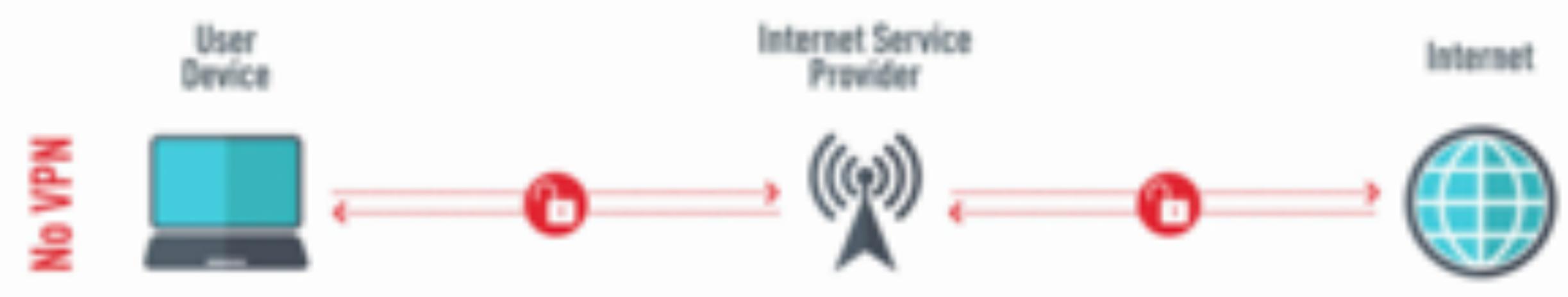


VPN - Virtual Private Network



How a VPN works





Getting into the infosec community





null - The Open Security Community

Conferences:

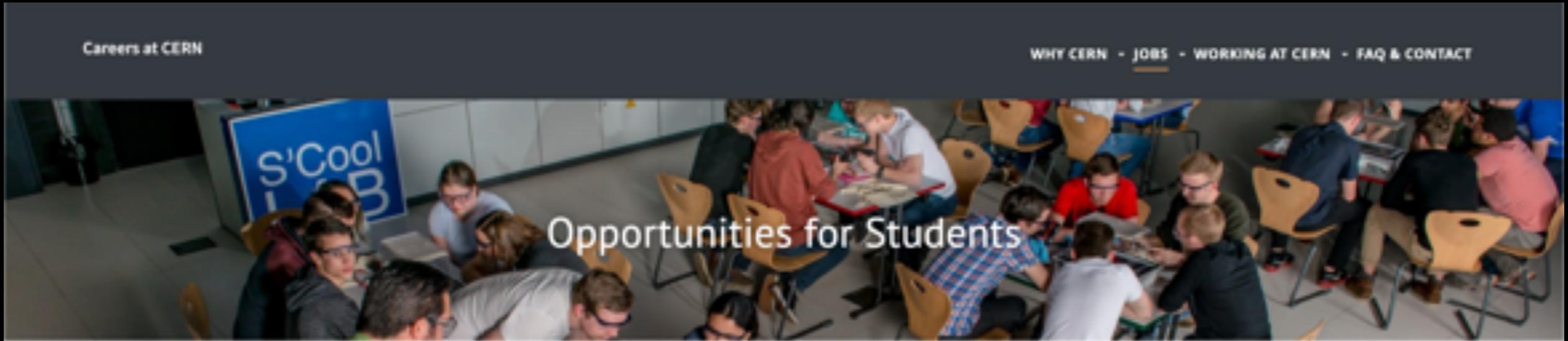






Careers@CERN





Technical Student Programme

This programme is now closed for applications. It will re-open in the Summer for applications for the December 2020 committee.

There's no better way to learn than on-the-job. When that job happens to be in a world-famous organisation and center of scientific excellence, even better. If you're an undergraduate in Applied Physics, Engineering or Computing and are looking for a practical training period or a place to complete your final project, you could spend 4 to 12 months at CERN during the course of your studies (Bachelor or Master). An extension of up to a maximum of 14 months may be given.

BEAMLINE FOR SCHOOLS (BL4S)

International competition for high school students from all around the world organised by CERN, the European Organization for Nuclear Research, in Geneva, Switzerland

The competition invites teams of high-school students to propose a scientific experiment that they want to perform. Because of the maintenance of CERN's accelerators since the end of 2018, the winning experiments in 2020 will be run at DESY in Hamburg, Germany. The first prize for the winning teams is a trip to DESY to carry out their proposed experiments at a fully-equipped accelerator beamline. There are additional prizes for shortlisted teams and certificates for all participants. How to take part?

Summer Student Programme

The 2020 edition of the Summer Student programme has unfortunately been cancelled owing to the COVID-19 pandemic.

The programme will re-open in the Autumn for applications for the 2021 edition.

How do you plan to spend your summer? How does getting involved in some of the world's biggest experiments sound? This is more than summer work. It's the chance to join CERN in Geneva – getting involved in the day-to-day work of our multicultural teams. Attend lectures, visit CERN facilities, take part in discussions and workshops with people who are leaders in their fields. In fact, it will be a summer like nowhere else on Earth.

CERN Openlab Summer Student Programme

The 2020 edition of the CERN openiab Summer Student programme has unfortunately been cancelled owing to the COVID-19 pandemic. The programme will re-open in the Autumn for applications for the 2021 edition.

Summer work experience in a place like nowhere else on earth: the birthplace of the world wide web! If you're studying computer science, a great way to spend your summer could be to join the openlab summer student program, to work on an advanced IT project and follow IT lectures specially prepared for you by experts at CERN and other institutes. Visits to the accelerators and experimental areas are also part of the program, along with visits to external companies. Interested? Check it out and take part!

Short-Term Internship Program

Imagine what it would be like to be part of, and contribute to, one of the largest projects on the planet. If you're looking for a short term training (1 to 6 months), how cool would it be to say you're working in CERN?

How to contact me:



https://sharad1126.github.io/