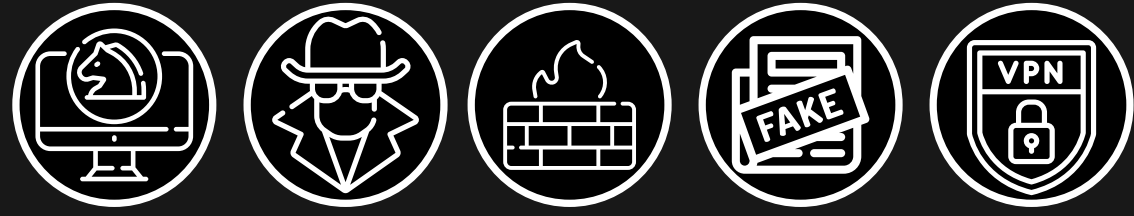


STRANGER VPNS

99% Match 2021



The story so far...

What?

Streaming platforms offer a large variety of content, but its availability depends on the location of the viewer. Some commercial VPN providers **advertise to lift these restrictions** by leveraging their globally distributed server network, even though many streaming platforms employ **VPN detection mechanisms**.

Why?

The commercial VPN ecosystem is **“highly opaque”**, a lack of independent and peer-reviewed evaluation means that functions such as geo-unblocking are **effectively black boxes**. The purpose of this research is to look into these black boxes and see how they work.

How?

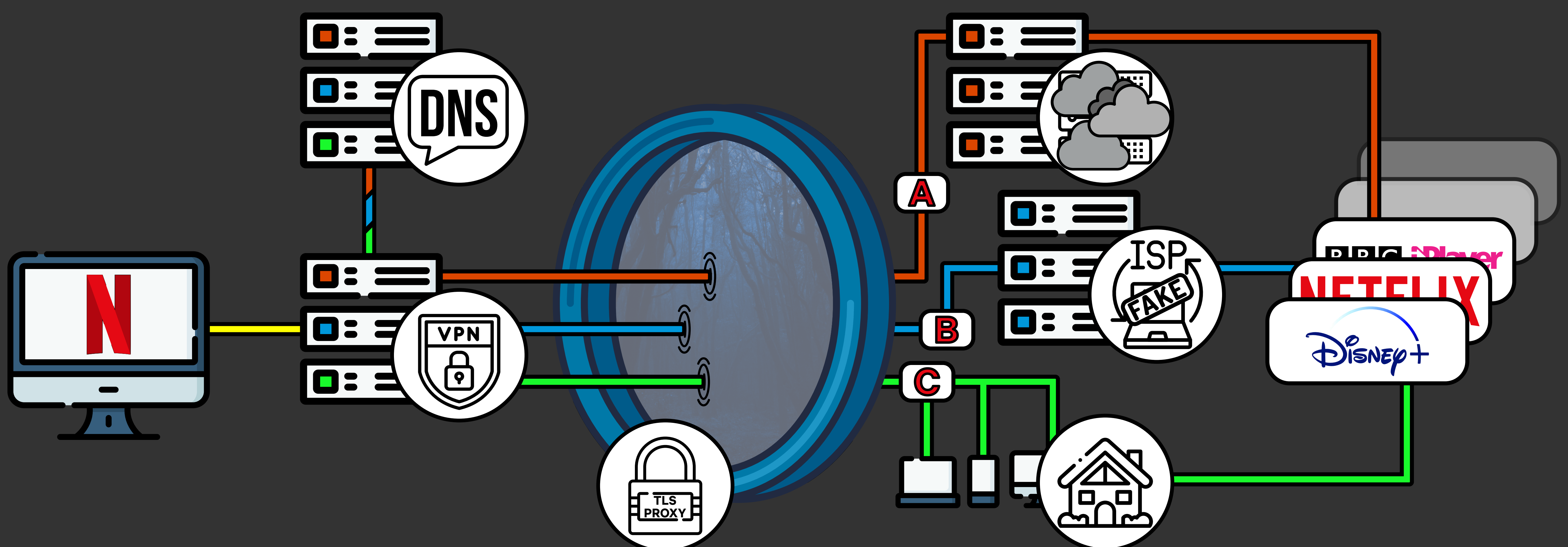
By purchasing subscriptions to **6 large VPN providers**, which advertise with unblocking capabilities, and setting up a measurement testbench for **longitudinal data collection**.

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Keywords: VPN, Geo-unblocking, Residential Proxy



(Image: Flaticon.com)

Preliminary Results

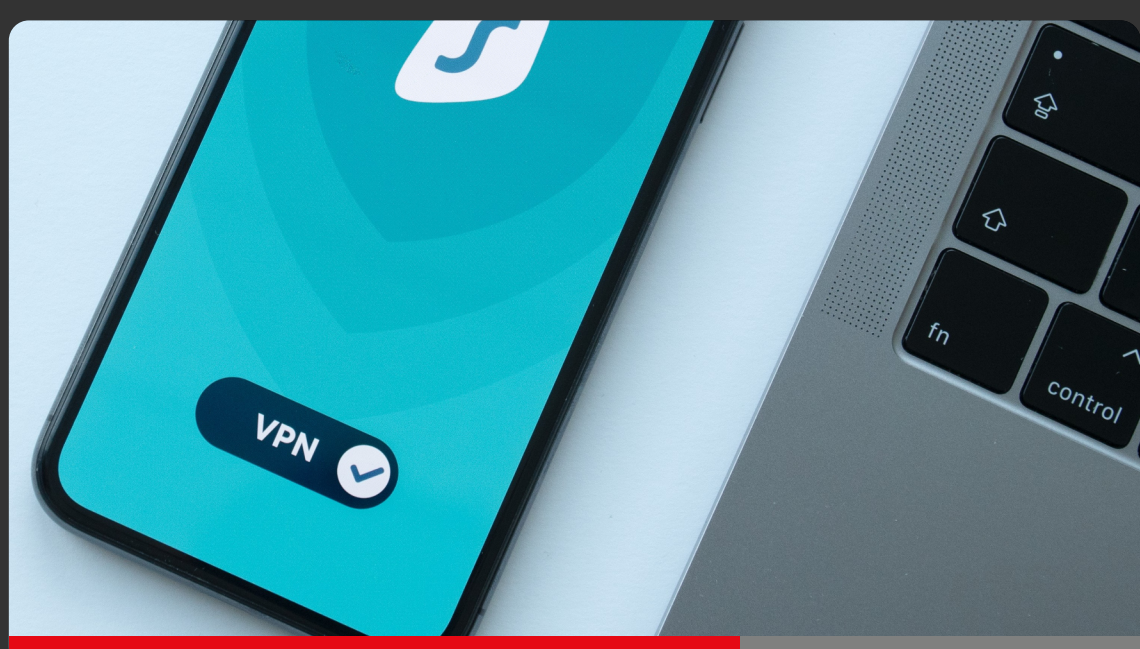
1



The Three Main Methods

- A** Using **“obscure”** hosting providers
- B** Creation of **fake** (residential) ISPs
- C** With **residential proxies**

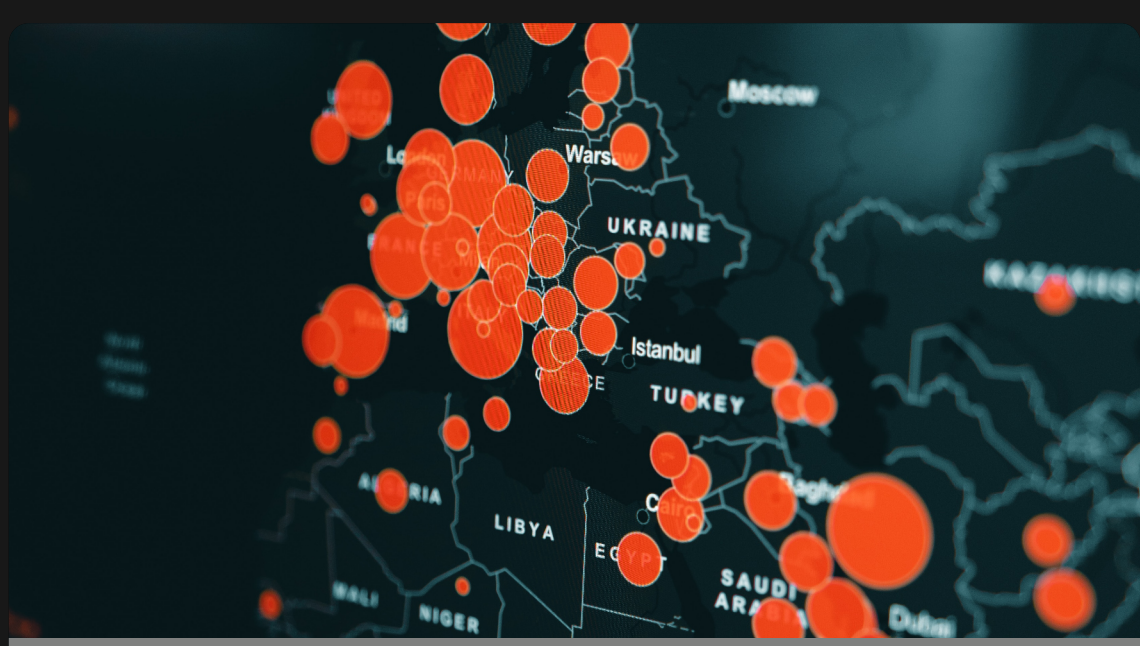
2



Unblocking Capabilities

So far, more than **38,500 unique IP addresses** located in over **400 unique Autonomous Systems** have been recorded. Of those, **0.89% are IPv6 addresses (~340)**.

3



Notable Unblocking Exit-Networks

Apart from **residential ISPs**, exit-networks have also been identified in **enterprise networks**, **research networks**, and **government networks**.

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