### **HARSH GUPTA**

Task 7: Identify and Remove Suspicious Browser Extensions Objective: Learn to spot and remove potentially harmful browser extensions. Tools:Any web browser (Chrome, Firefox) Deliverables: List of suspicious extensions found and removed (if any)

🔍 Extension Name: Hola VPN – The Website Unblocker

Category: VPN / Proxy Service

\* Platform: Google Chrome (also available on Firefox and other platforms)

### 1. Overview

Hola VPN is marketed as a free, unlimited website unblocker designed to help users bypass regional restrictions and censorship. It offers access to restricted content such as websites and streaming services, making it popular among users looking for simple, cost-free VPN services.

However, despite its popularity, Hola VPN has been flagged for malicious activity and significant security risks, making it a cautionary example of how browser extensions can compromise user privacy and safety.

### 2. Key Features Promoted by Hola VPN

- Free to use with unlimited bandwidth
- Easy website unblocking
- P2P (peer-to-peer) technology
- · No registration required

## 3. Identified Security Issues

Risk Area	Description
Data Tracking	Hola tracks user behavior, browsing habits, and potentially personal data.
Unencrypted Traffic	Internet traffic routed through Hola is not encrypted, risking exposure.

Risk Area	Description
Botnet Allegations	Hola was caught routing traffic through users' IPs to create a commercial VPN network (Luminati), turning users into exit nodes without informed consent.
No Transparency	Terms of service and privacy policy often fail to clearly disclose risks.
Potential for Abuse	Your IP could be used for illegal activity without your knowledge.

# 4. Timeline of Key Incidents

Year	Incident Description
2015	Hola VPN was exposed for turning user devices into exit nodes and selling bandwidth via Luminati (now Bright Data).
2017– 2024	Continued reports of unencrypted data traffic and privacy breaches.
2025	Still flagged by cybersecurity experts as unsafe and privacy-invasive.

# 5. Technical Analysis

# • Extension Permissions:

Requests wide-ranging permissions including:

- Access to all website data
- Modify browser settings
- Proxy and VPN control

# Data Handling:

Hola does not provide strong encryption. User traffic is sent in cleartext, making it vulnerable to interception (man-in-the-middle attacks).

## Network Behavior:

Uses peer-to-peer routing, which exposes your device as a node in a global traffic chain. You may inadvertently serve content you didn't request or facilitate data from unknown sources.

## 6. Expert Reviews and Warnings

- Mozilla and Chrome Web Store reviews flag Hola VPN for:
  - Suspicious background activity
  - o Excessive permissions
  - o Poor data security practices
- Cybersecurity researchers (including from Kaspersky and EFF) advise users to avoid Hola VPN and recommend alternatives that do not rely on P2P or opaque data handling.

### 7. Recommendations

- Do not use Hola VPN, especially for sensitive browsing or streaming over public networks.
- · Remove the extension immediately if installed.
- Use reputable VPN services like:
  - ProtonVPN
  - NordVPN
  - Mozilla VPN
  - Mullvad
- Regularly audit browser extensions for security and privacy risks.

## 8. Educational Value

The Hola VPN case demonstrates how even popular and highly rated extensions can:

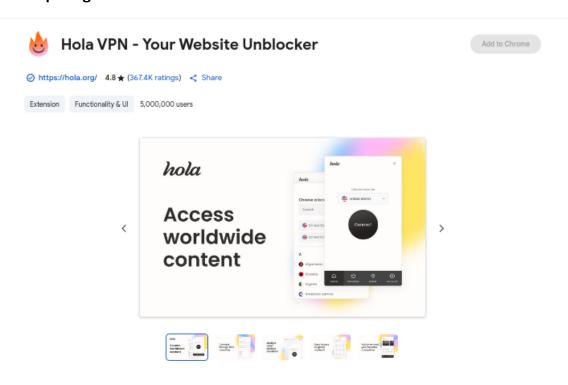
- Violate user trust
- Pose serious privacy risks
- Function as decentralized networks without user consent

This underlines the importance of understanding permissions, reading policies, and researching developers before installing browser extensions.

# Prepared by:

Name: Harsh Gupta Date: 03-07-2025

Internship Program: ELEVATE LABS CYBERSECURITY INTERNSHIP



## Overview

The easiest way to access the Borderless Internet, Hola VPN gets you Access to the global online content you want!

A simple way to access a more open internet, Hola VPN gets you access to the global online content you want!

Unblock websites, protect your privacy, and enjoy secure, more private browsing with Hola VPN, the fast, free, and unlimited VPN proxy for Chrome. Bypass geo-restrictions, hide your IP address, and encrypt your internet traffic with just one click!

Why Choose Hola VPN?

🌃 Stab C. Dzemium VDM ... Salov a fran version with some limitations or unarado to unlimited VDM access with our Dzemium etc.

## Privacy practices

Hola VPN - Your Website Unblocker has disclosed the following information regarding the collection and usage of your data. More detailed information can be found in the developer's privacy policy.

Hola VPN - Your Website Unblocker handles the following:



### Personally identifiable information

For example: name, address, email address, age, or identification number



### Financial and payment information

For example: transactions, credit card numbers, credit ratings, financial statements, or payment history



### Om Authentication information

For example: passwords, credentials, security question, or personal identification number (PIN)



## Personal communications

For example: emails, texts, or chat messages



### Location

For example: region, IP address, GPS coordinates, or information about things near the user's device



### Web history

The list of web pages a user has visited, as well as associated data such as page title and time of visit



### II User activity

For example: network monitoring, clicks, mouse position, scroll, or keystroke logging

This developer declares that your data

- · Not being sold to third parties, outside of the <u>approved use cases</u>
- · Not being used or transferred for purposes that are unrelated to the item's core functionality
- · Not being used or transferred to determine creditworthiness or for lending purposes