

Mitchell Wommack, Joshua Gilbert, Jason Nguyen

CSC481: Senior Project

Literature Review

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Raspberry Pi Mobile Hacker Project Overview:

Our project will be two parts. In the first part we will be showcasing how vulnerable the average person is to digital malefices. We will demonstrate this by instructing how anyone can go online and buy a small and cheap computer (Raspberry Pi) and use instructions easily found on the internet to turn it into a mobile hacking device that is unknowingly used against them.

In the second part of project we will show how the average person can protect themselves in the digital world from such attacks. Our belief is that by first demonstrating how easy it can be for someone to disrupt them digitally, the audience will have a better understanding of how important it is to prepare for it and will there for become more engaged and concerned about how they can protect themselves.

Information Sources:

Below is a list of links showing how someone can easily build their own Raspberry Pi hacking devices:

- <https://www.hackster.io/jithinsanal1610/portable-hacking-station-using-raspberry-pi-274bf8>
- https://www.youtube.com/watch?v=NvX9Dmxixaw&feature=share&ab_channel=PNPtu
- <https://lifehacker.com/how-to-build-a-portable-hacking-station-with-a-raspberr-1739297918>
- <https://hackwarenews.com/6-diy-hacking-projects-for-aspiring-hackers/>
- <https://null-byte.wonderhowto.com/how-to/build-beginner-hacking-kit-with-raspberry-pi-3-model-b-0184144/>
- <https://null-byte.wonderhowto.com/how-to/set-up-headless-raspberry-pi-hacking-platform-running-kali-linux-0176182/>
- <https://gbhackers.com/raspberry-pi-and-kali-linux/>

The following is a list of ways to disrupt others using a Raspberry Pi hacking device:

- <https://null-byte.wonderhowto.com/how-to/wardrive-with-kali-raspberry-pi-map-wi-fi-devices-0176558/> - This link shows how to map Wi-Fi devices.
- <https://null-byte.wonderhowto.com/how-to/hack-wpa-wifi-passwords-by-cracking-wps-pin-0132542/> - This article explains how to hack WPA Wi-Fi passwords by cracking the WPS PIN.

- <https://raspberrypi.com/hacking-wifi-raspberry-pi/> - This article illustrates how someone can use the Raspberry Pi to hack someone's Wi-Fi.
- <https://null-byte.wonderhowto.com/how-to/enable-monitor-mode-packet-injection-raspberry-pi-0189378/> - This article shows how to enable monitor mode and packet injection using the Raspberry Pi.
- <https://www.kali.org/penetration-testing-with-kali-linux/> - Free training for penetration testing with Kali Linux.
- <https://alison.com/course/ethical-hacker> - Free ethical hacker course.

Below is a list of literature regarding how someone may protect themselves online:

- <https://www.cisecurity.org/spotlight/ei-isac-cybersecurity-spotlight-multi-factor-authentication/> - An article from the Center for Internet Security (CIS) about multi-factor authentication.
- <https://www.cisecurity.org/spotlight/cybersecurity-spotlight-passwords/> - An article from the Center for Internet Security (CIS) about the importance of strong passwords.
- <https://www.cisecurity.org/spotlight/ei-isac-cybersecurity-spotlight-patching/> - An article from the Center for Internet Security (CIS) about the importance of software updates and patching.
- <https://www.usnews.com/360-reviews/vpn/what-is-a-vpn> - An article from U.S. News explaining what virtual private networks (VPN) are and their importance.