

1. Intranet Connectivity Between Laptop & Pi:

- A) Download connectify hotspot app online
- B) Set your hotspot name, password and activate your hotspot - this will be your laptop hotspot
- C) Turn off your local wifi to ensure that the pi can connect only to your laptop hotspot where unlimited pi devices can
- D) SSH the hotspot name and password into the pi SD card and use VNC viewer to open up the pi
- E) In the pi desktop screen, in the wifi section, you should see that it is connected to your laptop hotspot, not any ext

2. VNC Viewer & Advanced IP Scanner:

- A) Download Advanced IP Scanner App which will help you check if your pi is connected to your laptop
- B) Download VNC Viewer - copy the IP address found in your advanced IP scanner and then you can open the pi desktop screen
- C) Alternatively, you can go to command prompt and type ssh pi@IP Address

3. Setting Up Connection Between Transfer Of Data & TCP Communication Between Pi And Laptop Server:

Use python socket programming to establish a TCP connection between the client i.e the pi and the server i.e. your laptop
I wrote the codes myself to establish the connection between my laptop to the pi and can successfully receive bytes of data

4. Benchmarking Data Of The Camera Module:

- A) Helped streamline benchmarking process and improve camera framerate capture by 20% to send in more video data streamlines
- B) Improved pi camera module resolution by 30% to improve capture rate