Fall 2023

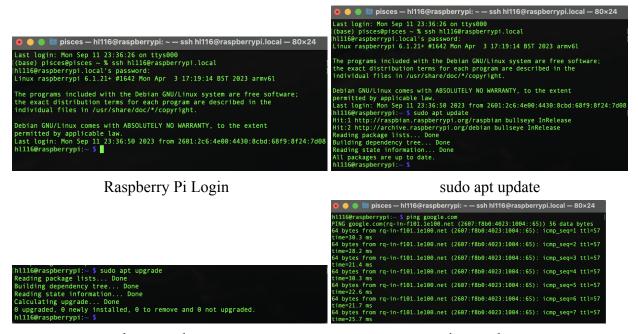
Mobile and Embedded System Design and Application - ELEC 553

Project 1

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In this project, I followed a straightforward series of steps to successfully set up my Raspberry Pi Zero W. Initially, I downloaded the official Raspberry Pi Lite OS image from the official website and proceeded to write it onto the SD card, then modify the wpa_supplicant configuration file in the SD card to let Raspberry Pi get WiFi. Once that was done, I powered up the Raspberry Pi and established a connection to the device using SSH. My next steps involved running "sudo apt update" and "sudo apt upgrade" to familiarize myself with the Linux system and ensure it was up to date. To validate the internet connection, I executed a simple "ping google.com" command as shown in the following figures.

Surprisingly, I didn't encounter many challenges throughout the project, completing it in just under 2 hours. Looking ahead, I am excited about the prospect of working on more advanced projects with the Raspberry Pi. One particular area of interest is emulating a RISC-V processor on the Raspberry Pi. This endeavor would not only deepen my understanding of RISC-V but also highlight its potential as a viable alternative to established architectures like Intel, AMD, Arm, and their respective partners, even though RISC-V still has a long journey ahead to compete at that level.



sudo apt update

pin google.com