

Here are the tools, accessories and softwares you should have:

- WinSCP
- Putty
- Intel XDK IDE
- Powershell (optional)
- Fing (Android optional)
- Memory card reader
- Power brick with a DC barrel pin (9V ideally)
- Access to a Linux Environment (optional: only required if you'd like to boot the Edison from the SD card)

### **Edison Resources**

1. AlexT's Galileo & Edison Pages ([link](#))
2. Real Python ([link](#))
3. SciVision ([link](#))

### **Setup Tutorial**

- Flash the latest Intel Edison Yocto Image onto your Edison Board. You can do this over a wired or wireless connection. If you're flashing the Edison Image for the first time, follow the wired tutorial steps. Use the wireless tutorial only if you understand the risks involved, or you've previously bricked the Edison Board and can't reflash over a wired connection.
  - Wired Flash Tutorial ([Official](#), [Unofficial](#))
  - Wired Flash Tutorial for a Bricked Edison ([Unofficial](#))
  - Wireless Flash Tutorial for a Bricked Edison ([Unofficial](#))
- Update Intel's IoT Developer Kit Libraries ([Official](#))
- Add AlexT's unofficial repositories to the opkg package manager.
  - I ran into a ton of trouble trying to understand how to successfully [add unofficial repositories](#) to the opkg package manager through the base-feeds.conf file. I learnt you shouldn't upgrade opkg (opkg upgrade) after you've updated the repositories (opkg update). AlexT does [not recommend](#) doing a blanket opkg upgrade with his unofficial repos. You'll max out the Edison's memory in the process if you do, making your board very unstable and disabling the the virtual and USB COM ports. If you do make that mistake, you will have to wirelessly flash a new image to the Edison and lose all your config settings and packages (if you haven't backed them up already). **DO NOT EVER RUN opkg upgrade WITH ALEXT'S REPOS LINKED TO BASE-FEEDS.CONF!**
  - In trying to deal with the above issue, I decided to expand the /boot partition and limiting the maximum disk space used by the logs ([link](#)). You might want to do the same ([link](#)). You probably won't run into out of memory errors even if you don't (not tested), but I'm being prudent.

- Note: Edit the journald.conf file by uncommenting the SystemMaxUse parameter and inputting the value i.e. 10M (Not sure if this even works, when I check my journal size {journalctl --disk-usage} it still shows my edison hitting 44M)
- Follow [these](#) instructions to install OpenCV (and other cool packages) and get your Edison running a python script that runs images through a facial recognition algorithm. The results will be viewable on a web page that you'll set up. **There are errors in the current tutorial, I'll leave them for you to identify and fix.**

Common system commands you'll probably use a lot in a linux shell:

- Check kernel version -> uname -a (verbose) or -r (prints kernel name) or cat /etc/issue/
- Change Current working directory -> c
- d /dirCheck a directory's storage properties -> df -h /dir
- Check mounted and unmounted partitions -> fdisk -l
- Configure the edison -> configure\_edison
- To power off the Edison board -> poweroff /shutdown
- To reboot the Edison board -> reboot
- To check the status of or start/stop a service -> systemctl

#### Additional Resources

*Introductory manual to the Yocto project ([link](#))*

*How to properly mount a partition on linux ([link](#))*

*Reasons why unmounting a partition may fail ([link](#))*

*Setting up an Intel Edison Surveillance System ([instructable](#))*

*How to boot Edison from an SD card ([link](#))*

*Example Tutorial for the Intel IoT Analytics Platform ([link](#))*