1. **Tell me about yourself**

After I immigrated to Canada, I joined ViXS as a driver engineer, to fix bugs, add new features for PCIe device mode av driver, and ported the driver to embedded Linux and other embedded platform.

After two years, I was promoted to driver team leader, responsible for new designed SoC chip Linux bootloader, kernel, io drivers, like uart/i2c/spi/eth/sata/usb/sd/pcie host driver. First, we tested on FPGA before tape out, then bring up on SDK board after the chip came back, and then did performance benchmark, profiling, SDK release, customer issue fix and support.

After so many years development on 4 generation chips, I have in-depth understanding on kernel internal, such as D-Cache, MMU, IPC, DMA, multithread programming, application/kernel/driver/firmware interface

1. **Example of interesting/difficult project**

vcomm driver

hdd encryption

secure boot

PM support, standby mode

boot time optimization

unionfs

1. **Example of Bug which is hard to debug**

Kernel crash duo to sata driver overwrite memory

Ping very slow while system idle

Performance optimization for 4 direct recording plus 4k player

1. **What’s your job as team leader?**

Task estimation

Divide and assign development task

Priority

Performance evaluation with boss

1. **For io drivers, do the IP provider have sample driver for reference?**

Yes, need understand specification, IP core configurations and try different settings to get better performance etc, how driver works, and how it hook up with kernel. Fix issues reported by customers.