HP, Roseville, California

Dear Hiring Manager,

I am applying for the position of "Embedded Software Engineer" in your esteemed HP company.

I believe I am the right candidate for the position . I have a MSc in Microelectronics & Solid State Electronics. My 15+ years of experience, among others, includes a dual-MIPS SOC chip designing , Linux kernel triming/driver porting , FreeRTOS driver porting/task coding, and bootloader coding.

I am committed to achieving results and working long hours to achieve them is not a problem as evidenced by delivering at the rate of one IP core per month, with the SOC passing at first tapeout with a US patent awarded.

During developing/porting device drivers for Linux/FreeRTOS, I know what happened inside the CPU when writing to the registers, which give me some advantage at bootloader/driver developing .

I have WiFi driver developing/debug experience. I wrote UDP sender/receiver by FPGA leading me know every bit in the network transport layer.

I use git/gnumake/bash/perl/sed/grep/vim as my developing tools.

I use OpenWRT/buildroot to build custom base system. I haven't used Yocto .

The SPI, I2C, UART, PWM generators and Ethernet, are IP cores in my eyes. I can write them by verilog, and I know how to operate them in most efficient mothod in linux device drivers or FreeRTOS drivers.

During prototype developing, I use mathematica/Golang/perl, while Golang/ C/verilog/FPGA will be used to verify the system.

A living example : I wrote a Makefile last week to help in generating my resumes from $T_{\rm F}X$ to PDF :

https://github.com/dengyanuo/tex_resume/blob/main/Makefile The interviewer can detect whether I am a qualified C developer under linux by it.

I hope my background meets your needs and I look forward to elaborating on how my specific skills and abilities will benefit HP company.

I can be contacted at deng.ya.nuo@gmail.com or (408)444-5520 to arrange for a convenient time to meet.

Sincerely, Yanuo Deng (James)