

Yanuo Deng (James)

1565 Cress Way, Olivehurst, CA, 95961 \* (408)444-5520 \* [deng.ya.nuo@gmail.com](mailto:deng.ya.nuo@gmail.com)

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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 Semiconductor. My 15+ years of experience, among others, includes a dual-MIPS SOC chip designing , Linux kernel trimming/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 method 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<sub>E</sub>X to PDF :

[https://github.com/dengyanuo/tex\\_resume/blob/main/Makefile](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](mailto:deng.ya.nuo@gmail.com) or (408)444-5520 to arrange for a convenient time to meet.

Sincerely,

Yanuo Deng (James)

## Resume of Yanuo Deng (James)

1565 Cress Way, Olivehurst, CA, 95961 \* (408)444-5520 \* deng.ya.nuo@gmail.com

### CAREER OBJECTIVE

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Focused professional with 15+ years of experience and a proven knowledge of embedded system (Linux/RTOS), and digital & analog circuit design. Aiming to leverage my skills to be a successfully Integrated Circuit Engineer, Software Engineer, or Network Security Engineer.

### EXPERIENCE

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#### C-MATRIXTECH CO.LTD., Zhuhai, China, 3 people R&D/6

*Integrated Circuit Designer, Dec 2017 - Feb 2019*

- \* Verilog coding, FPGA simulation and debug for self-powered SOC chip.
- \* MCU debug; Port C-language from Assembly for the MCU; Mixed (Analog) circuit design
- \* Achieved self-powered MCU SOC used on iPhone data cables; Mass production 10k/M

#### VIOMI CO.LTD., Foshan, China, 3 people R&D/200

*Software (Firmware) Engineer, May 2017 - Oct 2017*

- \* Linux driver for the Wi-Fi chip; Speech Recognition App for Linux
- \* Achieved smart wireless Speech Recognition module; Mass production 3k/M

#### BLUEWAY CO.LTD., Huizhou, China, 5 people R&D/2500

*Software (Firmware) Engineer, May 2016 - Apr 2017*

- \* FreeRTOS system migration to STM32 for the embedded board, target for electric mowers.
- \* Using Mathematica to optimize the walking path of the mowers, to add some AI.

#### ADON CO.LTD., Foshan, China, 3 people R&D/350

*Software (Firmware) Engineer, Oct 2013 - Dec 2015*

- \* Linux driver & app for the HomePod (Wi-Fi speaker/charger for iPhone); Mass production, 3k/M

#### SKYIT SOFTWARE CO.LTD., Shunde, China, 5 people R&D/500

*Software Engineer, Dec 2011 - Jul 2013*

- \* Windows Client App by C#; Data API by C for the first order a meal Android App in China

#### VBRIDGE MICROSYSTEM INC, San Jose, CA, 5 people R&D/12

*Digital Integrated Circuit Engineer, Apr 2005 - May 2008*

- \* IP cores of security engineer: AES, DES, 3DES, MD5, SHA1, CRC; 5-bits MCU core.
- \* All IP cores tapout in a dual-MIPS SOC Chip.
- \* Linux + VxWorks board support package (BSP) was built for the dual-MIPS.

### EDUCATION

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XI'AN university of technology, Xi'an city, Shannxi, China

*Master of Science (M.S.) Microelectronics & Solid State Electronics (Apr 2005)*

### ADDITIONAL SKILLS

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- \* C, Verilog, Vim, Bash, Perl, Go-language, Gnumake, git
- \* Linux / FreeRTOS driver

### Certifications

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Electronics Engineer Certification, Foshan, China, Aug 2008

### Personal Characteristics

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I work well within teams, and I am assertive and creative in finding the best solutions for the team. I am known to be stable and firm when coding. I am committed to achieving goals set for me. I speak and write Cantonese/Mandarin.

### Referrals

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Dan Teuthorn, Teledyne microwave solutions, VP engineer, 408-421-7303, Den.Teuthorn@teledyne.com

Tang Shanqiang, Cadence, Principal Application Engineer, +65-90546301, ansent@cadence.com

Stephen Fung, Atheros/Qualcomm, semiconductor engineer, 408-338-5175, stephen@thepoint.church

USA Employment Authorization Document (EAD) valid from 2021 to 2023. No work sponsor is needed.