Gaurav Baweja Dear Hiring Manager,

I am applying for the position of "Embedded Developer" in your esteemed 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 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 TEXto PDF :

https://github.com/dengyanuo/tex\_resume/blob/main/Makefile The interviewer can know 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 your 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)

## Resume of Yanuo Deng (James)

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

### CAREER OBJECTIVE

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

### **EXPERIENCE**

# 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

# 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**

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

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

### ADDITIONAL SKILLS

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

#### Certifications

Electronics Engineer Certification, Foshan, China, Aug 2008

#### **Personal Characteristics**

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

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, semicondutor engineer, 408-338-5175, stephen@thepoint.church

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