## Wei Tan

(+86)13805152997 | tw84452852@hotmail.com

#### PROFESSIONAL EXPERIENCE

Intel Oct 2018 - Present

Virtualization developer

Shanghai, China

- Development on ACRN project, mainly focusing on device virtualization and performance profiling and tuning based on Intel virtualization technology.
- Linux-based RTOS performance profiling and tuning, responsible for KPI on Xenomai and Preempt-RT operation systems.

**ZTE** Jun 2015 - Oct 2018

System engineer Nanjing, China

- Implement Android system virtualization with Linux container technology.
- Implement an efficient remote desktop protocol based on SPICE.
- Simulate a variety of hardware devices under Android, e.g. screen, camera, multi-touch pad, GPS, audio card.
- Linux/Android system performance tuning, including file system, scheduler, block device, network.
- Embedded system development, Linux and Uboot porting, Flash driver development.

ArcherMind Oct 2013 - May 2015

Adnroid BSP engineer Shanghai, China

Cooperate with Intel, responsible for Android Mobile/Tablet GFX related stuff.

- Android GFX frameworks, including SurfaceFlinger, HWC, View subsystem and so on.
- Display driver, including Android HAL, display controller driver, panel.
- Android rendering system, including Skia, OpenGL, GPU driver.

Hillstone Jul 2011 - Sep 2013

Platform engineer

Suzhou, China

- MIPS hardware firewall development, focus on UBOOT and operate system development.
- Linux kernel TCP/IP stack development, also have experience of some protocol, such as ARP, TCP, UDP, IP, ICMP, FTP, IMAP, POP3 and so on.
- Linux driver development, including NIC, i2c, smbus and PCIE bus driver.

#### LEADERSHIP EXPERIENCE

#### **Operating System research**

Aug 2007 - Present

- An enthusiastic Linux kernel hacker, I learned a lot by reading its source code and wrote some blogs for it (https://blog.totorow.xyz/categories/understand-linux-kernel).
- Implement a simple operating system from the scratch named TOS (https://github.com/tw4452852/tos).
- A VM implementation based on KVM technology (https://github.com/tw4452852/zvm).

#### Language research

Jun 2011 - Present

- Golang: Digging into GO runtime details including GC, scheduler, map, split stack, and so on
  (https://blog.totorow.xyz/categories/read-go), Also the positive contributor of some open-source projects, like Caddy,
  Elvish. And I also wrote some tools during daily work in Go.
- Rust: I'm participated in some open-source project development, like Nushell, Zellij and also some of my own tools are written with it.
- Dart/Flutter: I just wrote a finance application called Countbean to fulfill my accounting requirement during daily life (https://github.com/tw4452852/countbean).
- Zig: Developed a QEMU-like KVM frontend for deep learning the KVM/Virtualization technologies.

### **EDUCATION**

### Nanjing University of Posts and Telecommunications

Aug 2007 - Jun 2011

Information security Bachelor Computer

Nanjing, China

- GPA: 3.06 / 4.0
- Honors/Awards: The Third Prize Scholarship (2007, 2009), The Third Prize of information security competition.

# **MISCELLANEOUS**

- Skills: C/C++(Proficient), GIT(Proficient), GO(Proficient), Rust(Normal), Zig(Proficient)
- Github: https://github.com/tw4452852
- Blog: https://blog.totorow.xyz
- · Interests: sports, music, reading