Takahiro AKASHI
Senior Software Engineer

174-1-202 Higashi-naganuma,
Inagi-city, Tokyo, JAPAN
+81-90-9382-0048 (mobile)
takahiro.akashi@linaro.org (office)
akashi.takahiro@socionext.com (office)
akax.hiro@gmail.com (private)

Summary:

Linux software engineer with 13+ years of experiences in a semiconductor company after working on various OS-related research works in a computer vendor. Last 10 years dedicated in contributing to the development of OSS, linux kernel and firmware.

Seek for a new challenging job where I can leverage my experiences in Linux kernel and related software in order to continue to contribute to OSS as well as to foster my own skill in emerging technology areas, among others, interested in virtualization, security or adaptation of new cpu architecture like RISC-V.

If possible, find a position who is allowed to work from home remotely (Japan). Otherwise think of moving near to on-site office.

Work experience:

Linaro limited, Tokyo (remote),   Mar 2013-present

full-time assignee (to kernel WG) dispatched by Socionext
- Developing arm64 linux kernel, features I implemented include ftrace and kexec/kdump
   (partially involved in audit, seccomp, kgdb and livepatch as well)
- Developing U-Boot UEFI subsystem, including secure boot and capsule (firmware) update, in addition to lot more contributions in improving and bug fixing on U-Boot
- Developing a PoC of a hypervisor-agnostic virtio backend framework on RTOS (zephyr) under Xen
- Analysis on network latency on guest virtual machine under Time Sensitive Network (TSN) environment [1]
- Most recently, working on U-Boot SCMI support

Socionext Inc, Yokohama,   2003-present

(previously part of Fujitsu Limited's Semiconductor Division)
Software Development Division (2010-2013)
Tech lead of Linux development team,
- Responsible for delivering Linux BSPs for Arm-based ASIC evaluation boards
- Worked on bringing up boards and developing device drivers across a few generations of platforms

Software department of FR-V(ASSP) Division   (2003-2010)
- Engaged in product planning of new SoC's (32-bit micro-controllers with VLIW) and software platform, also involved in marketing efforts toward ISVs and customers

Fujitsu Limited, Kawasaki,   1988-2003

Remote service group of Computer System Division (2000-2003)
- Engaged in planning and establishing the infrastructure with System Engineering Group to provide remote (servers and devices) monitoring services
- Responsible for promoting and expanding the service areas to USA, EU (Germany) and Korea
- Lead in developing agent software for servers

Planning & Research group of UNIX Server Division (1988-2000)
Engaged in various research works on pre-production technologies for Unix-based server clusters & host-standby systems, including
- Study on coherent interconnect (infiniband)
- Study on Oracle's parallel database option
- Performance tunings for database benchmark (TPC-C)
- PoC of microkernel-based Unix system for SPARC with fault-tolerance
- Study on a single system image of clustering servers

Unix System Laboratories, New Jersey,   1990-1992
full-time software engineer dispatched by Fujitsu
- Improving commercial Unix system, SVR4 ES/MP, for multi-core systems, being responsible for delivering SMP-capable file systems and thread-safe libraries

Education:

Master of Information Engineering, Tokyo University, 1988
Bachelor of Electronic Engineering, Tokyo University, 1986

Qualifications & Skills:

Programming languages and Technologies

- Strong programming skill in C & Shell, working knowledge in Python & Rust
- Experienced for 15+years in developing Linux kernel, device drivers and low-level firmware, including TF-A, U-Boot and EDK2
- Experienced one year in developing Zephyr + Xen
- Knowledgeable with Arm architecture (v8) and Arm assembly
- Knowledgeable with hypervisors (kvm, xen)

Development tools and Process

- Proficient in version control tools (git, github)
- Proficient in agile development practice (JIRA, Redmine)
- Experienced in utilising ftrace and other performance tools to analyze the system performance and the bottlenecks.
- Experienced in utilising a simulator for development and debugging (qemu, Arm FVP)
- Experienced in utilising a jtag debugger for debugging (Arm's RealView ICE)
- Lots of experiences in upstreaming software patches (mostly linux and U-Boot) and cod reviews in the communities

Personal traits and Communication

- Strong commitment to task completion with many track records of contributions to upstream software
- Self motivation with an aptitude for acquiring skills and knowledge of new technologies
- Willingness in collaborating with inside and outside people alike
- Good leadership in managing a small group of engineers (~10)
- Ability of technical documentation and presentation skills in English. See [1]
- TOEIC 845 (2018)

[1] https://resources.linaro.org/en/resource/jfTURCDTat6faXFK8PwqwK
https://www.linaro.org/blog/network-latency-with-time-sensitive-networking-on-virtual-machine/