SJ (Seongjun) Kim

- Software Engineer - Linux, embedded, firmware, backend, cloud, integrations for 8 years.
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Experience

Software Engineer III - Coinbase (Jun 2023 - Present)
As part of the EAA Integrations team, Go-based services are developed for internal APIs within the help center, supporting various projects. Continuous updates are made to Kubernetes and infrastructure configurations based on requests. Junior engineers are mentored by facilitating daily task sharing, troubleshooting techniques, and code reviews.

Software Engineer III - Twitter (Sep 2022 - Jan 2023)
Go-based lint tools were developed to improve the pipeline within the Audio Space team. CI/CD scripts were also managed to integrate these tools into the developer workflow and address privacy regulations requested by the FTC.

Software Engineer III - Egnyte (Jan 2021 - Jul 2022)
The Migrations team developed Go cloud services to manage large-scale file migrations between on-premise and cloud storage. Self-managed Kubernetes clusters were deployed and maintained to facilitate scalable petabyte-scale transfers. Guidance was also provided to junior engineers working on cross-platform tool development and associated technical issues.

Software Engineer II - HP (May 2019 - Jan 2021)
On the Retail Solutions team, we developed Android tablet applications to provide integrated customer services within retail stores. We also delivered a Linux device driver and NDK wrapper for HP POS and printer systems, and integrated various POS peripherals such as cameras, scales, barcode readers, and wired/wireless sensors. Furthermore, we actively contributed to HP's custom Linux distribution development for edge servers.

Software Engineer I - Legrand (June 2016 - May 2019)
The Lighting Control team developed baremetal and RTOS firmware for nRF52 and STM32 MCUs using C. Peripherals were managed via I2C, SPI, RS232/485, and CAN protocols, along with the resolution of battery drain issues related to MCU power modes. MQTT and CoAP services were also delivered using Python and Golang for wireless demonstration applications.

Software Engineer I - ABOV Semicon and others (Apr 2011 - Apr 2014)
Within the Test Automation team, baremetal/RTOS firmware was developed using C for ABOV's MCU series in both automotive and digital appliance testing applications. The team's efforts encompassed the design of PCB circuits to integrate these MCUs with customer industrial solutions, and the utilization of LabVIEW for controlling test equipment and environments specific to digital sensor testing.

Education

MSEE - California State University, Los Angeles (Sep 2014 - Feb 2016)
Thesis: Parallel Processing of an Epipolar Geometry Algorithm on an FPGA Fabric Using OpenCL.

BSEE - Seoul National University of Science and Technology (Mar 2006 - Feb 2010)
Thesis: Project Integration Using ARM Based Linux System and AVR Microcontrollers for Industrial Applications.

Projects

Ziglang 0.14 and libxev setup

- https://gist.github.com/bus710/351202009ab2a040ae0b0308bb3f2f4a
- Zig's goto async I/O library, libxev usage step-by-step.

Golang + Vscode development environment setup

- https://github.com/bus710/golang-dev-env-setting
- Emerging high performance programming language, Go's installation, kicking a project off, IDE setting, and debugging.

Matrix2 - a toy project for Sense Hat with Go/Flutter app

- https://github.com/bus710/matrix2
- A toy project that provides its Flutter/web front-end and Go server to control the LED matrix of Sense Hat.

Zephyr RTOS development in Linux

- https://github.com/bus710/zephyr-rtos-development-in-linux
- A tutorial to install Zephyr RTOS development setup in Linux.

Keywords

- Languages: C, Zig, Rust, Go, Erlang, Gleam, Elm
- Skills: Linux, Docker, K8S, Terraform, AWS, GCP, Git, F/OSS, RTOS