

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)

In the EAA Integrations team, writing Go based services for the internal APIs within the help center supporting projects and Salesforce. Managing email based authentication process with cross-SaaS settings (GCP-AWS) and developing internal email inbox bots for privacy policy. Continuously updating cloud resources such as SQS, SNS, Lambda, DynamoDB, S3 via Cloud Formation and Terraform. Leading junior engineers to share daily tasks such as incident mitigation, code reviews, and unit/e2e testing.

Software Engineer III - Twitter (Sep 2022 - Jan 2023)

In the Audio Space team, developed Go based lint tools to improve the pipeline. Managed Github CI/CD to add the tools as a part of developer workflow and privacy regulation requested by FTC.

Software Engineer III - Egnyte (Jan 2021 - Jul 2022)

In the Migrations team, developed Go based cloud services to manage massive file migration between on-premise and cloud storage services such as S3, Glacier, and Google Cloud Storage. Delivered self-managed k8s clusters to help scalable services for Peta byte file transfer. Developed internal monitoring services with GCP Firewall, Firebase, and Stack driver. Led junior engineers to tackle the technical issues from cross-platform tool development for various server OSes.

Software Engineer II - HP (May 2019 - Jan 2021)

In the Retail Solutions team, developed Android tablet applications for integrated customer services of retail stores. Delivered Linux device driver and NDK wrapper for HP POS and printer systems. Integrated POS peripherals - camera, scale, barcode reader, wired/wireless sensors. Involved HP's custom Linux distro development for on-site edge servers and its supporting cloud counter parts within AWS for provisioning and operating.

Software Engineer I - Legrand (June 2016 - May 2019)

In the Lightings Control team, developed baremetal/RTOS firmware of nRF52/STM32 MCUs using C. Managed peripherals via various protocols - I2C, SPI, RS232/485, CAN. Resolved battery drain issues with the MCUs' various power modes. Delivered MQTT/CoAP services using Python/Golang for wireless demo applications.

Software Engineer I - ABOV Semicon and others (Apr 2011 - Apr 2014)

In the Test Automations team, developed baremetal/RTOS firmware of ABOV's MCU series using C for automotive and digital appliance products. Designed PCB circuits to integrate various MCUs with customer's industrial solutions. Used LabView to control the test equipments and environment for 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