

Guru Das Srinagesh

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EXPERIENCE

Senior Software Engineer, Qualcomm Innovation Center Inc., San Diego, CA (May 2021 – present)

- Owned Linux kernel SoC-specific drivers and developed new kernel features for ARM64 SoCs
- Led the kernel bring up of a new flagship Snapdragon SoC from pre-silicon to prototype
- Designed and implemented new features for the QCOM Secure Channel Manager driver
- Collaborated closely with upstream Linux and Android Common Kernel's GKI model
- Contributed open source changes to the Linux kernel and Android Common Kernel
- Created and maintained internal documentation of chipset bring up processes
- Mentored junior engineers and summer intern in team

Software Engineer, Qualcomm Innovation Center Inc., San Diego, CA (Dec 2017 – Apr 2021)

- Owned Linux kernel PMIC device drivers and their corresponding Android HALs for ARM64 SoCs
- Designed and implemented new features for battery charging, PWM, LEDs, interrupt controller
- Completely redesigned sub-peripheral interrupt handling driver and wrote new client driver for PM8008
- Contributed open source changes to the Linux kernel and participated in PMIC features bring up

Systems Engineer, Qualcomm Technologies Inc., San Diego, CA (Jul 2016 – Nov 2017)

- LTE Physical Layer Firmware development using proprietary RTOS
- Firmware algorithms to implement Automatic Gain Control of received signal strength

EDUCATION

Georgia Institute of Technology, Atlanta, GA (Aug 2014 – May 2016)

- Master of Science (M. S.), Electrical and Computer Engineering

M. N. National Institute of Technology, Allahabad, India (Jul 2008 – May 2012)

- Bachelor of Technology (B. Tech), Electrical Engineering

PROJECTS

Linux Kernel open source contributions

- <https://tinyurl.com/guru-das-linux-contribs>
- Authored Secure Channel Manager driver change to handle multiple simultaneous requests via a wait-queue
- Authored MFD driver for PM8008 chip with significant modifications to regmap-irq framework
- Converted PWM framework duty cycle and time period to u64 to allow for larger time periods
- Authored add-maintainer.py script to add respective maintainers to a Linux kernel patch series
- Contributed changes to extcon, pm8941, nvmm, temp alarm drivers

The Eudypatula Challenge (Jan 2017 – Nov 2017)

- Independently learned to be a Linux Kernel developer by solving a series of kernel hacking tasks

SKILLS

- C, C++, Python, Bash, Rust, Bazel
- Linux kernel, device drivers, operating systems, system on a chip bring up, embedded systems software, Android