SUYOG BURADKAR

Personal Info

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Address:
Near Shitla Mata Temple, Natraj Chowk, Sutarpura, Wani, District, Yavatmal, 445304, Maharashtra (IN)

Skills

C Programming

Shell Scripting

Python Scripting

CI/CD

Device Tree file creation/modification

Embedded Linux

Linux Kernel Device Driver Development (I2C, GPIO, SPI, UART)

Linux OS concepts, Linux internals.

Languages

Professional Summary

As an Embedded Systems Engineer with a expertise in Linux kernel development and maintenance. I've adeptly managed GitLab tickets, ensuring swift resolutions for system issues to maintain project momentum. My proficiency extends to modifying Device Tree Blob (dtb) files, where I've tailored configurations to support intricate vendor-specific features, optimizing hardware functionality.

Recently, I am engaged with integrating an I2C device (MPR121) into the Linux kernel, exemplified in my GitHub repository [https://github.com/suyog44/Linux-Study-Material/blob/main/9.I2C_Device_MPR121_New].

I am passionate about leveraging my skills to drive innovation and excellence in embedded systems development."

Experience

Embedded Systems Engineer, HCL Technologies. Bangalore, Karnataka
August. 2022 - Present

- Client: Sony Softwares India Pvt Ltd
  Handle issues with tickets assigned on GitLab
- Modify Device Tree Blob (dtb) files to support vendor-specific features.
- Apply kernel patches mostly from the Ubuntu Official repository
- Maintain system integrity and functionality.
- Engage in kernel release activities
- Reporting issues related to build or boot with target systems based on Qualcomm Dragon Board, NXP iMX6, NXP iMX8-plus
- Implement CVE fixes from community patches to enhance system security.
- Write test scripts in Python for Git commit diff and checking commit messages
- improving code review processes and version control.
- Perform testing on various kernel features like boot time, heap profile, LZ77 compression, version signature and perf tools.
- Resolve conflicts during merge activities or cherry-picking upstream commits.
- Cherry-pick missing commits from upstreams to keep the project updated.

Contractor - Embedded Systems Engineer (Freelance), Brisker Electronics. Mumbai, MAHARASHTRA
December. 2018 - June. 2022

- Client: **Shining Sun Vision, Nagpur**

English

Hindi

Marathi

- Led the integration of HVAC protocols
- focusing on Texas Instruments Sitara ARM64-based controllers for BACnet and Modbus implementations.
- Engineered solutions for protocol handling and device communication improving system efficiency and reliability.
- Fixed Modbus protocol issues over RS485 UART connections to integrate centralized air conditioning systems.
- Conducted board bring-up for Amlogic S905 based ARM64 board.
- Erased flash memory and loaded new Uboot loader on systems.
- Prepared Debian-based customized root filesystems.
- Integrated customized infrared remotes as keyboards for the application.

Education

Kamla Nehru Mahavidyalaya, Nagpur, MAHARASHTRA
Bachelor of Science in Electronics and Computer Science, Information Technology, Present

Achievements

- Best Performer Award for Valuable Contribution
  Linux SARD Project
- Tokyo (Team Award)
  Recognized for outstanding contributions to the project team
  Most Valuable Contractor Award
  Sony Awards 2024
- Individual Category
  Awarded for exceptional performance and contributions as a contractor
  OpenHack IISc Bangalore (Runner Up)
  Developed an innovative solution based on generative AI and LLMs
- Google GENAI Hackathon 2024 (Finalist)
  Ranked in the top 15 among 24000 participants from the Asia-Pacific

Training

- EMN Technologies, Hyderabad,
  Intern: January 2015 - March 2016,
  Developed applications in C programming
  Integrated peripherals like SPI, UART, I2C