Bengaluru, 560068, India
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Sankirth Gunnam, Staff Software Engineer

Experienced Staff Software Engineer with 7 years in semiconductor R&D, specializing in RF tools development and system automation. Proficient in Python, C, C++ with a strong background in software engineering and system design. Skilled in mentoring teams, fostering growth, and promoting best practices. Known for consistently delivering high-quality software solutions, and enabling efficient engineering workflows. Passionate about streamlining workflows, enhancing scalability, and driving innovations.

Employment History

Staff Software Engineer at Samsung Semiconductor India R&D, Bengaluru

April 2024 — Present

- Directed the RF Tools Team, delivering high-quality software solutions on schedule while ensuring system scalability and performance.
- Introduced web frameworks like Django, ReactJS, and Electron to transition legacy applications to web-based platforms, streamlining delivery and enhancing user accessibility.
- Developed a CAD tool enabling RF Engineers to generate code by creating schematic-based connections, providing a no-code solution for efficient workflows.
- Mentored team members, fostering professional growth and promoting best practices in software development.
- Collaborated across teams to conceptualize and deliver innovative tools aligned with organizational goals.

Associate Staff Engineer at Samsung Semiconductor India R&D, Bengaluru

April 2022 — April 2024

- Designed and developed RF driver code along with a desktop GUI application using the Qt framework to streamline driver automation workflows.
- Built a Qt-based application for RF Engineers to auto-generate RF driver code, ensuring consistency and compatibility across Samsung smartphones and tablet models.
- Implemented advanced GUIs leveraging Qt Model View Delegate (MV) programming for improved user experience and functionality.
- Developed a Microsoft Language Server Protocol (LSP) using LLVM Clang to parse and generate Abstract Syntax Trees (AST) for C and C++ code, providing detailed insights for enhanced code analysis.
- Enhanced RF firmware architecture to support automation-driven development and reduce manual intervention.
- Packaged executable applications and created robust installers using tools like PyInstaller, NSIS, and InstallForge for seamless client delivery.

- Consistently delivered high-quality software solutions on time, exceeding client expectations while enabling efficient workflows for engineering teams.

Senior Software Engineer at Samsung Semiconductor India R&D, Bengaluru

September 2019 — April 2022

- Designed and developed desktop applications to automate smartphone testing using RF test equipment, adhering to 3GPP conformance specification 36.521-1.
- Created user-friendly GUIs using the Qt GUI framework.
- Established communication interfaces with test equipment via SCPI commands.
- Authored driver code for AT commands to support Device Under Test (DUT) scenarios.
- Implemented graph-plotting tools to visualize RF parameters for enhanced debugging and analysis.
- Documented software designs at both low and high levels.
- Collaborated with clients to tailor features to their requirements, consistently surpassing expectations.

Associate Software Engineer at Harman International India, Bengaluru

October 2017 — September 2019

- Contributed to middleware development for In-Vehicle Infotainment (IVI) systems using C++ (Linux) and Java (Android).
- Developed interfaces for iPod Accessory Protocol (IAP2), enabling seamless integration with third-party apps like media players and navigation systems.
- Played a key role in CarPlay development, implementing USB/Wi-Fi projection technology with IAP support for Apple device authentication.
- Utilized static code analysis tools to improve code quality and reliability.
- Authored unit tests and comprehensive documentation for various middleware modules.

Education

P.U.C in Computers, Narayana E-techno School, Bengaluru

April 2011 — May 2013

Diploma in Embedded Systems, Cranes Varsity, Bengaluru

May 2017 — September 2017

Bachelor of Engineering, The Oxford College of Engineering, Bengaluru

May 2013 — May 2017

Links

Linkedin **Github**

Skills

- Python
- ReactJS, HTML, CSS
- I2C, SPI, UART, MIPI
- Git and Perforce

- C and C++
- Data Structures and Algorithms
- Django Web Framework
- Linux

○ Software Debugging   ○ Code Review

○ Systems Design   ○ Project Management

○ Team Management

Languages   Hindi   Kannada

                   Telugu   English