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Srinivas Kowtal

Summary of Qualification

- 13 years experience in designing and developing complex multi-core software frameworks on performance constrained mobile platforms.
- Extensive knowledge of android multimedia framework, OpenMAX, camera framework, video codecs, and inter-processor communication.
- Led teams to achieve technical excellence under significant time pressures and exceed customer expectations.

Education

2000 **Bachelor Of Engineering**, *Bangalore University*.
- *Major:* Computer Science and Engineering
- *Honours:* First with Distinction. *GPA 3.77/4.0.*

1996 **Pre-University (10+2)**, *Karnataka State Pre-University Board.*
- *Major:* Science (Physics, Chemistry, Math, Biology)
- *Honours:* Ranked 16th out of more than 200,000 students. *GPA 3.87/4.0.*

Employment History

Feb13-Dec13 **Qualcomm India Pvt Ltd, *Hyderabad*.**
- *Role:* Senior Staff Engineer

Jun04-Jan13 **Texas Instruments India Pvt Ltd, Bangalore**.
- *Role:* Principal Engineer, Technical Project Lead, Component Lead

Sep00-Jun04 **Sasken Communication Technologies Ltd, Bangalore**.
- *Role:* Software Engineer

Technical Expertise

Languages	C, Python, C++
OS	Android, Linux
Multimedia	MPEG4, H.264, OpenMAX IL
Android	StageFright, CameraHAL, HW Composer HAL
Software	Git, Code Composer Studio
HW	OMAP2x/3x/4x/5x

Work Experience

Feb13-Dec13 **User Experience on QCom Snapdragon 400/600 platforms**.

Qualcomm, Role – Senior Staff Engineer

- Responsible for User Experience Optimization
- Improved performance on various use cases like game play, touch, fling, and launch latencies
- I was awarded "QualStar" award for contributions to the LGE V510 Tablet project

Jan12-Dec12 **Smartphone for TCL China (S900)**.

Texas Instruments, Role – Principal Engineer

- Led a team of 6 engineers and achieved the fastest deployment of Android phone by a first time customer on TI's OMAP4 platform
- Responsible for software architecture and requirement specification for the follow up phone on next generation OMAP platform
- Responsible for production qualification of video and imaging use-cases

Apr12-Dec12 **Android based video surveillance for HikVision on OMAP4x**.

Texas Instruments, Role – Principal Engineer

- Responsible for bringing around the customer on the feasibility of OMAP platform for video surveillance applications
- Responsible for the product from requirements, software architecture definition, development, to final product qualification
- Developed multi-camera multi-channel video capture

Apr11-Nov11 **Google-Samsung Galaxy Nexus ICS on OMAP4x**.

Texas Instruments, Role – Principal Engineer

- Led a team of 5 engineers
- Recognized by both TI and Google for integrating the multimedia subsystem in a significantly redesigned Android platform under severe time constraint and achieving the highest quality standard
- Re-architecture of IPC
- Memory architecture optimization

Feb08-Apr11 **Multimedia framework on OMAP4x platform**.

Texas Instruments, Role – Technical Project Lead

- Led a team of 12 engineers
- Designed the Distributed OpenMAX Multimedia framework
- Developed a common video decoder architecture which significantly reduced the time required for adding a new video decoder in the system
- Integration of the Distributed Multimedia architecture in Android
- Designed and implemented the Ducati (OMAP4x's MM Subsystem) error recovery framework
- Design and implementation of resource manager
- Contributed to the design and implementation of the Camera-Imaging Framework

Feb06-Feb08 **Multimedia framework on OMAP103x based feature phones**.

Texas Instruments, Role – Technical Project Lead

- Led a team of 6 engineers

- Proposed and designed a unique OpenMAX implementation which drastically cut down development, testing, conformance, and maintenance effort from 4 months to 1 month for each component.
- Responsible for design, development, integration, and testing of OpenMAX components for all video and imaging codecs.
- Design and development of Screen Services Layer, an efficient tiling window manager for deployment on feature phones.

Jun04-Jan06 **DSP multimedia framework on OMAP2430/3430**.

Texas Instruments, Role – Component Lead

- Led a team of 4 engineers
- Designed and developed DSP multimedia framework which cut down the development and maintenance effort from 3 months to 1 month for each component.
- Demonstrated all multimedia uses cases with in two weeks of the OMAP2430 silicon becoming available.

Aug01-Jun04 **MPEG4/H.264 Video Codec on OMAP15xx**.

Sasken, Role – Software Engg

- Designed and implemented optimized algorithms for motion estimation, motion compensation, vlc, and rate control.
- Proposed and led the development of purely C version of the codec running on Windows platform which was bit exact with the production C55x version of the codec. This significantly cut down the effort needed in solving innumerable defects.

Sep00-Aug01 **MPEG-7 Content Based Multimedia Retrieval**.

Sasken, Role – Software Engg

- Implemented Eigen face based face recognition system
- Implemented a contour-shape based image retrieval system

Honors

At Qualcomm, I was given "QualStar" award for contributions to the LGE V510 Tablet project

Texas Instruments awards "Diamond Awards" to individuals or teams for showcasing exemplary performance towards achieving organizational goals.

Specifically:

- Contribution that is above and beyond the call of duty
- Contribution with customer and/or business impact
- Consistent, exceptional performance for 2 or more quarters in a row

I have been honored with "multiple diamond awards" in my tenure at TI.