# Ranjhith Kumar Kalisamy

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Strip kumarranjhith & reverse as ranjhithkumar.  
Add a . between [h, k] & [l, c] pairs & an @ between [r, g] pair.  
<http://www.ranjhith.com>

## Objective

Seeking an ambitious position in Mobile platforms with emphasis on Graphics domain where my skills & experience will add value to operations.

## Brief Profile

About 10 years of extensive experience in Embedded, Mobile & Hand-held Systems, specially in the areas of Graphics & Multimedia.

Has thorough knowledge of EGL 1.4, OpenGL ES 1.x/2.0 & OpenVG 1.1 Graphics standards.

Has understanding & working experience in Graphics middleware & Adreno GPU drivers in Android & BREW/BMP.

Worked in VxWorks for Text to Speech Systems using USB speakers.

Knowledgeable in MPEG2 Systems layer & DirectFB Standards.

Undertaken & successfully completed varied tasks such as GPU bring-up, Driver development, Application development, Integration of 3rd party software into frameworks & Customer support.

Have lead a team of 6 engineers to commercialize Adreno Graphics drivers on three different Mobile SoCs.

## Employers

**Qualcomm CDMA Technologies**, Hyderabad, India  
From April 2006 to till date.

**Toshiba Embedded Software** (*formerly SoCrates Software*), Bangalore, India  
From August 2002 to April 2006.

## Skills

*Languages*: C, C++, JAVA, Assembly Languages of MIPS & ARM

*Scripting Languages*: Python, Batch files, Shell, Matlab

*Technologies*: SVG Tiny, OpenVG 1.0, EGL 1.4, OpenGL ES 1.x, OpenGL ES 2.0, SurfaceFlinger, Gralloc, MPEG2 Systems layer, DirectFB

*RTOS*: VxWorks, REX

*OS Platforms*: Linux, Android, Windows Mobile 6.5, BREW Mobile Platform

*Tools*: Debugger for MIPS, Toshiba MPI ToolChain, Visual Studio 6.0, Platform Builder, Trace32 Debugger for ARM, GIT, Gerrit, Repo, Perforce, CVS, Eclipse, Android SDK, Android NDK, OProfile, GNUPlot, GDB, Valgrind, Vim

## Education

**Master of Science** in *Computer Science*, **Illinois Institute of Technology**, Chicago, USA.  
Graduated in May 2012.

**Bachelor of Engineering** in *Electronics & Communication*, **Coimbatore Institute of Technology**, Coimbatore, India.  
Graduated in March 2002.

## Projects

*(snipped)*

### mRTOS (Mini RTOS)

*Module*: Scheduler, Memory Manager, Timers, Semaphores  
*Role*: Designer, Developer  
*Team Size*: 3  
*Duration*: 1 month

*Details*: mRTOS was done during my on-the-job training programme at Toshiba Embedded Software. mRTOS had all general features of a Real Time Operating System; viz: Scheduler, Memory Manager, Timers, Semaphores & MailBoxes. A time critical application was also developed using the APIs of mRTOS.

*Contributions*:

* Involved in the design of Scheduler & the Task Context.
* Implemented Semaphores, Timers & Memory Manager for mRTOS.
* Contributed towards mRTOS Feature list & source code management.

## References

*(snipped)*