

# Hemanthkumar G K

Senior Software Engineer

## CAREER OBJECTIVE

*A Senior Software Engineer with an experience of 10+ years in embedded software development with good understanding of C and C++ programming, Linux internals, threads, inter-process communications, deadlocks, concurrency control and RTOS concepts with exposure to the complete Software Development Life Cycle.*

## EDUCATION

*B.E. in Computer Science & Engineering (CS & E) from VTU (2008 – 2012), AIT Chikmagalur. Visvesvaraya Technological University  
Karnataka, India.*

## CONTACT

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## Work Experience

*Working as a “Senior Software Engineer III” in Cisco India.*

*Worked as “Senior Software Engineer” in Harman International and “Senior Software Engineer” & “Software engineer” in Platform and Multimedia group from July 2013 to June 2017 (Worked as a consultant at Intel mobile communications) in Global Edge Software Ltd, Bangalore.*

## PROFESSIONAL SKILL SET

<i>Languages:</i>	<i>C, C++ basics</i>
<i>Operating Systems:</i>	<i>Linux, ThreadX, Sys-Bios</i>
<i>Technologies:</i>	<i>Linux programming and Internals, Multi-threading, IPC, Knowledge on Various Unix commands and System Calls</i>
<i>Tools:</i>	<i>GDB, GNU Toolchain, Lauterbach, CCS, Source insight, Klocwork, GIT, Clearcase, Flashtool, Coverity tool, Code collaborator, Bugzilla, Perforce</i>

## PROJECT DETAILS

<b>Project Name</b>	<b>Network Security Firewall (ASA,FTD), Firepower Management Center(FMC)</b>
<b>Organization</b>	Cisco India
<b>Role</b>	Software Engineer III
<b>Duration</b>	May 2019 – Current
<b>Team size</b>	10
<b>Environment</b>	Linux
<b>Description</b>	<p>Part of Platform Team and implementing the platform level software for Next Generation Firewall(NGFW) and handling the multiple use cases &amp; improving the product quality by implementing features in each releases.</p> <p>Fixing the issues which causes packet drops, networking performance and crashes etc.</p>
<b>RESPONSIBILITIES</b>	<p>Also involved in multiple projects and handling the firmware customization &amp; releasing the firmwares to customers and working on next generation FMC platform.</p> <ul style="list-style-type: none"><li>▪ Coding / Development / Debugging and fixing issues</li><li>▪ Functional Testing, Scripts modification</li></ul>

<b>Project Name</b>	<b>Rear View Camera(RVC)</b>
<b>Organization</b>	Harman International
<b>Role</b>	Sr Software Engineer
<b>Duration</b>	July 2017 – 2019
<b>Team size</b>	3
<b>Environment</b>	Linux, Sys-Bios
<b>Description</b>	<p>Implementing the rear-view camera features for car and handling the multiple use cases based on the received CAN message in Android core side. Handling the camera driver in DSP core to handle the camera feed data, by communicating with Android core.</p> <p>Fixing the issues which causes camera view distortion, crash issues, implementing rear</p>

view parking assistance, implementing the new features as per the customer request and interacting with HMI layer & Diagnostics team to handle the car rear view camera feature.

#### RESPONSIBILITIES

- Coding / Development / Debugging and fixing issues
- Functional Testing, Scripts modification

#### Project Name

**Audio driver (Consultant at INTEL MOBILE COMMUNICATIONS)**

**Projects: XMM7160, XMM7260, XMM7360, XMM7480 ,IBIS and XMM7560**

#### Organization

Intel Mobile Communication

#### Role

Development Engineer

#### Duration

March 2015 – Jun 2017

#### Team size

5

#### Environment

Linux, ThreadX

#### Description

Implementing core audio driver functionalities and handling modem related functionalities for 2G/3G/4G calls and data handling with DSP and Network layer (Protocol stack). Bring up the Audio Driver on new Intel platforms & DSP booting, developing features according to customer requirements (enhancements), debugging with Lauterbach, GDB and fixing audio issues, analysing the Core dump to find out the cause of crash.

#### RESPONSIBILITIES

- DSP bring up
- Coding / Development / Debugging and fixing issues
- Functional Testing, Scripts modification

<b>Project Name</b>	<i>Android Playback</i>
<b>Organization</b>	<i>Global Edge Software Ltd.</i>
<b>Role</b>	<i>Development Engineer</i>
<b>Duration</b>	<i>March 2014 – Feb 2015</i>
<b>Team size</b>	<i>3</i>
<b>Environment</b>	<i>Linux</i>
<b>Description</b>	<i>Integration of H264 hardware decoder into android multimedia framework such as Stagefright to achieve full HD playback. Integrated hardware decoder for MPEG4/3GP which contains the AVC video format and AAC audio format.</i>
<b>RESPONSIBILITIES</b>	<ul style="list-style-type: none"> <li>▪ <i>Involved in integrating the hardware accelerator.</i></li> <li>▪ <i>Implemented OMX interface to interact with H264 HW decoder.</i></li> <li>▪ <i>Understanding of OpenMax.</i></li> <li>▪ <i>Understanding of Stagefright framework components such as Awesome Player, Stagefright Player, OMX Codec.</i></li> </ul>

## **EDUCATIONAL DETAILS**

<b><i>B.E in Computer Science &amp; Engineering with 70%, 2012</i></b> <i>Adichunchanagiri Institute of Technology, Chikmagalur</i>
<b><i>PUC with 62.83%, 2008</i></b> <i>Govt Junior College, Chikmagalur</i>
<b><i>SSLC with 79.84%, 2006</i></b> <i>Vinayaka high school, Kalasapura</i>

***Training Attended******Global Edge Software Ltd Training Program******Duration****6 months****Topics****C and Data Structure**Software Engineering, UNIX programming and Internals**Linux Device Drivers, Multi-threading**Networking [TCP/IP protocol suite] Socket Programming**Knowledge on Various Unix commands and System Calls**Personality Development [Self Awareness, Time Management, Team Work]*