

**AREA OF STRENGTH**

- ◆ Embedded Software
- ◆ Embedded C
- ◆ Linux Kernel Development
- ◆ Linux Char, Network and Block drivers
- ◆ Linux network programming, multi-threading, and application programming
- ◆ Linux Kernel & User Space API
- ◆ SAN Network Environment.
- ◆ TCP/IP socket programming
- ◆ Programming Multi core SoCs
- ◆ I2C, SPI, GPIO, Serial Ports
- ◆ Windows NDIS driver
- ◆ Shared memory, Memory controllers, Interrupts & DMA
- ◆ LTE NAS, RRC Layer
- ◆ Board Bring-up
- ◆ Protocol development
- ◆ Telecom and Embedded product development
- ◆ GDB Debugging
- ◆ RTOS
- ◆ Shell, Lua Scripting development
- ◆ Sparx systems enterprise architecture (UML design)
- ◆ Requirements Analysis

**PROFILE HIGHLIGHTS**

- A highly motivated and committed Embedded Software, Linux kernel, Device driver & Protocol Developer with 8 years of experience.
- Good understanding on embedded aspects of C programming.
- Excellent in C/C++ Programming and debugging.
- Excellent working experience in Linux kernel environment.
- Good working knowledge on Linux Character, Network and Block drivers.
- Good understanding of standards based wireless and wired product development.
- Involved in design, development and testing of a SAN network based multipath and path failover Linux driver.
- Designed and developed security protocol (IPSec, IKEv2) on Linux Network stack.
- U-boot porting for a TI SoC based custom hardware platform.
- Involved in design, development and porting of LTE on RISC SoC based Network driver architecture on Linux.
- Proficiency in working with multi-threaded programs and sockets in windows and Linux.
- Had working experience on debugging with Trace32 (Simulator mode).
- Worked in Windows driver team for NDIS 5.1 network driver for security protocol and C++ based windows GUI for the same product.
- Good understanding in automobile infotainment systems.
- Embedded product development life cycle.

**Technical Skills:**

Programming / Scripting Language	C, C++, Shell Scripting, Python, Lua
OS / RTOS	Linux: Kernel Internals, Networking, multi-threading, Socket Programming, Device driver development Windows: NDIS Driver, Socket Programming, GUI development. RTOS: QNX broad bring up, BSP Android: Kernel Internals.
Technology/Domain/Protocol	LTE, IPSec, IKEv2, Ethernet MAC programming, Telecom, Embedded development, IPV4, TCP/IP, Infotainment systems.
Development Environment / Tools	Conversant with Linux and windows OS-based development environment. IDE: cscope, kscope, eclipse based IDE, VC++ WinDDK, Git, Perforce, Clear Case, SVN , RTC
Debugger	GDB, KGDB, crash, Kdump, DbgView, windbg, Trace32
S/W Engineering Methodologies	Agile Development, Waterfall
Others	Wireshark, TCP dump, Iperf, In-Circuit emulators, Sparx UML diagram

**Professional Experience:****Internet based (IoT) Smart Security Device**

- **Language, Tools & Environment:** C, GDB, Arduino IDE, Atollic TrueSTUDIO
- **Platform:** EVM for Espressif's ESP8266 SoC, STM32F429I SoC, Linux, FreeRTOS
- **Client:** HiTech Info Group

**Board support package (VP4 BSP) development for TI's DRA74x Jacinto 6**

- **Language, Tools & Environment:** C, TI's code composer studio 6.1, GNU GCC, QNX, QNX Device drivers
- **Platform:** DRA74x Jacinto 6
- **Client:** Panasonic Automotive Systems

**Platform software development for Automotive Infotainment system (VP4)**

- **Language, Tools & Environment:** C, C++, GNU GCC, QNX, Sparx systems enterprise, Eclipse (RTC), Lua
- **Platform:** QNX Development environment, DRA74x SoC.
- **Client:** Panasonic Automotive System.

**Platform software development for Jupiter VSAT ER5 terminal**

- **Language, Tools & Environment:** C, GDB, GNU GCC, Linux compilation Environment, Linux Device drivers.
- **Platform:** Linux Network stack, Linux Kernel 3.x
- **Client:** Hughes Network Systems

**Multipath and load blanching on SAN Network (Power Path)**

- **Language, Tools & Environment:** C, RHEL (5,6,7), SLES (11,12), Oracle UEK Linux, Crash, GDB
- **Platform:** Linux kernel 3.x, CLARiiON, Symmertrix, VNX, VPLEX.
- **Client:** EMC Corporation

**Porting Android (Jelly Bean) on TI's OMAP4460**

- **Language, Tools & Environment:** C, GDB, Linux kernel development environment.
- **Platform:** EVM for TI's OMAP4460 SoC, Android (Jelly Bean), Linux Kernel 3.0.31
- **Client:** SASKEN communication Technologies

**BSP development for Samsung Galaxy phones (QCBSP 2011)**

- **Language, Tools & Environment:** C, Android, Linux Kernel, Trace32, GDB, Perforce.
- **Platform:** Qualcomm Snapdragon APQ8060, Android GB, Android JB
- **Client:** SAMSUNG

**3GPP LTE UE Prototype Linux Driver**

- **Language, Tools & Environment:** C, Linux network stack, GDB, GNU GCC, Linux development environment.
- **Platform:** EVM for TI's OMAP3530, Ethernet DM9000, Ethernet Realtek HW.
- **Client:** SAI Technology

**U-boot and Android porting on Devkit 8000**

- **Language, Tools & Environment:** C, GNU GCC, Linux development environment.
- **Platform:** EVM for TI's OMAP3530, Ethernet DM9000
- **Client:** SAI Technology

**Windows GUI interface for VPN Application**

- **Language, Tools & Environment:** C, C++, NSIS, MS Visual Studio, GDB
- **Platform:** Windows XP
- **Client:** SAI Technology

### **Windows Service and Protocol development**

- **Language, Tools & Environment:** C, C++, MS Visual Studio, GDB, GNU GCC.
- **Platform:** Windows XP, Linux
- **Client:** SAI Technology

### **IPSec Driver development for VPN**

- **Language, Tools & Environment:** C, WinDDK, GDB, GNU GCC, KGDB, WinDBG, DbgView, NDIS 5.1
- **Platform:** Realtek Hardware, Linux kernel 2.6, Windows XP
- **Client:** SAI Technology

---

### **Educational Qualifications:**

**2005-2008** *Master of Computer Applications*, Anna University

**2002-2005** *Bachelor of Science*, Bharathiar University

- Major Subject - **Electronics**; Ancillaries - Computer & Mathematics