

DAKSH JASRA

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Senior Software Engineer with 15 years of experience in shaping the concepts to reality in the field of CE devices (STB, TV, Gaming Consoles, Mobile) and Web technologies (Frontend and Backend). Pursuing challenging technical leadership role in a growth mindset organization.

- **Developed** and **Integrated** Software/Hardware for Set-top box's (Deployed >10 million), XBOX, PS3, Smart-TV, WiFi Router deployed at end customers for NET (Brazil), Claro, Verizon FiOS TV, Comcast, Mitsubishi TV, Valuepoint Networks & Micromax.
- **Prototyped** multiple technologies **Android OS**, Insight/Audience Measurement/**Analytics**, NETUI (**JavaScript**), SmartXMLDiff (Python) and CAF-Mosaic **NodeJS/REST API/ES6/BackEnd**, Peer to Peer broadcasting CDN engine, Media Gateway and LTE STB.
- Proficient with **Android SDK App development** in Java.
- **Collaborated** with teams (internal, clients and third party's) **across geographically dispersed locations**. Ability to effectively manage ambiguous situations and drive towards clarification. Results-oriented with a demonstrated ability to influence others and drive change
- Extensive hands-on experience in **Linux kernel, driver and application** cross compilation, system bring-up (configuring/buildroot, patching and building Linux kernel), Ported modules like uClibc (embedded C library), SNMP, OpenSSH, Busybox, pppoe (ADSL), DynDNS.
- **Integrated** Linux based Wireless Router (802.11b, embedded Linux) **ported** UPNP & embedded RADIUS server with MD5 and TLS support.
- Traveled **regionally and internationally** on short notice for demos, requirement scoping, development, integration and debugging.
- Gallup Clifton Strengthsfinder 5 Key Strengths: Futuristic, Strategic, Achiever, Focus, Positivity.
- Publications:
 - ❖ Patents : [20100262986](#) 'Viewing History' & [20120254455](#) 'Downloading Video using excess bandwidth'
 - ❖ K-Start (Nagra innovation sharing platform)
 - Cloud Castle -A Secure Cloud Application Framework/Nagra Security as A Platform 13.03.2015
 - Family Security Analysis and Protection Tools and Services 14.03.2015
 - Self-Install/Self-Provisioning Wizard 14.03.2015
 - Porting NMP (Nagra Media Player) over Gaming Consoles [PlayStation, Xbox and Wii] 14.03.2015

SKILL SET/ EXPERTISE

Languages	C/C++, Python, Java , HTML5/JS/ES6/REACT, SQL(SQLite), Go, AWS CLI
OS	Embedded Linux, Android , Windows, RTOS (VxWorks, ThreadX, VRTX)
Technologies	TCP/IP, DVB, I2C, OTT/HLS, MPEG, UPNP(DLNA), 802.11/802.1x, MQTT, XML, JSON, SOAP, REST, MVC, NODE.JS, NoSQL
Tools	Android Studio , Eclipse, Git, Grunt, Gulp, Perforce, Jenkins , Docker, MongoDB, JIRA, Agile (SCRUM, Kanban), vi, Visual Studio, Eclipse, Binutils, AWS, JTAG, GDB, Wireshark, Ethereal

PROFESSIONAL EXPERIENCE

Aug 2011 – Present | Nagra | Senior Software Engineer

Plan, schedule, and execute all stages of software development lifecycle for **Nagra/OpenTV** solution for NET (a Brazil MSO) and Claro Columbia:

- Accomplished **rapid integration and deployments** of OTV5.1&5.2 MW stack over millions of Technicolor and Humax STB's.
- Developed and Integrated various **Java/Android/HTML/JS apps** i.e. Android UPNP mobile app, NET UI (System app, PVR, WHPVR), NETUI2(Notify) and Teleidea UI.
- Developed and Maintained **Continuous Integration** framework based on Jenkins **pipelines**.
- Managed multiple priorities and continue to innovate new **POCs** @ Claro and NET HWs along with ongoing support items.
- Designed & Implemented BackEnd POC CAF Mosaic **REST API/ES6**. This approach enhanced the UI navigation time from 1-2 sec to ~½ sec.
- Designed & Implemented **SmarXMLDiff POC** for Gracenotes data ingestion which **speed up ingestion** of 100MB files from 2 hrs to 4 mins.
- Implementing Insight/**Analytics** new API for IPVOD playback and navigation errors, for addressing field issues effectively.
- Stabilized and delivered complete **Whole Home PVR/MOCA** feature on a critical timeline - unblocked payments from the customer (NET).
- Trained and mentored junior teammates worldwide and actively reviewed development activities to ensure appropriate quality standards by internal and external teams.
- C, C++, Embedded Linux, **Android**, JavaScript/ES6, React, Grunt, Gulp, REST, Python, Java, Jenkins (pipeline as), Docker, Linux Device Drivers, Perforce, Git, SCRUM-Kanban

Feb 2011 – Aug 2011 | Comcast [Cisco System Inc.] | Sr. Consultant

- Architecture & Development of Selectable Output Control (SOC) a content protection DRM technology for Cisco and Comcast.
- Support hardware and software integration, **Root-cause of product issues regardless of source** (hardware, system, or software)

Jul 2006 –Feb 2011 | Verizon FiOS TV [Wipro Technologies Ltd] | Senior Software Engineer

- **Rapid prototyping/integration** of features like TV screensaver, **p2p broadcasting**, A/B testing /Analytics/metrics logging <E STB
- Implemented VZ FIOS TV DVR UI and Middleware components, OTT/Live video streaming and Network DVR on Sony PS3 and Intel STB.
- Ported SQLite to Motorola and Cisco STB platforms and then also Integrated SQLite to middleware for 3rd Gen FIOS TV DVR features like **multi-room DVR** and Multi-hubs with scheduling and recording from remote terminals/hub's.
- C/C++, JavaScript, Lua, Motorola QIP6416/2500, DAC, Cisco Explorer Class A and B platforms, DNCS, PS3, SeaChange VOD server, Intel 4100 Metrowerks CodeWarrior, RayV and Linux (Fedora & Embedded)

Apr 2004 – Jun 2006 | Mitsubishi Digital TV/Zoran [HCL Technologies Ltd] | Sr. Software Engineer

- Designed and Developed DTV System memory POST, OSD and Menus UI application for Mitsubishi DTV application control
- Implemented (SSDP) Discovery Module using IGMP v2. Developed a test harness application to test the API's supported by the UPNP stack.

Jun 2003 – Mar 2004 | Valuepoint Networks Inc [Contech Software Ltd] | Sr. Software Engineer

- Implemented UPNP & CLI for **WiFi router**. Ported uClibc (embedded C library), SNMP, OpenSSH, Busybox, pppoe (ADSL), DynDNS etc.
- Demoed and Implement IEEE 802.1x Authentication Server (Standalone **Radius Server**).

Oct 2001 – May 2003 | Micromax Informatics Ltd | Embedded Software Engineer

- Implemented embedded Smart card read/write driver module for the contact and contact less memory cards.
- Implemented Remote Modem Communication Protocol using Hays command's (Over PSTN lines).

EDUCATION

Bachelor of Engineering in Computer Science, MD University, Rohtak (INDIA) - 1997-2001