**Keith Taylor**

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20+ years in the digital video industry in roles as developer, professional Services team lead, integrator, systems sales engineering, lead architect. 20+ years overall experience in systems engineering/integration and software development including full SDLC experience on multiple platforms. Proven expertise with **DTV** technologies; **MPEG compression/encoders(**Harmonic, Elemental, Cisco) **DVB/ATSC**, **Adaptive bitrate protocols; HLS, DASH, Smooth Streaming Subject matter expertise in CDN and Origin architectures DAI/ SCTE 35/104. Motorola, Cisco/SA and IPTV head ends**, experience with most **VOD** and **DRM** solutions. Expertise in analysis of video compression using **MPEG analyzers (Manzanita, Ineoquest, Tektronix etc.)** Professional fluency and extensive project experience with **C/C++, Python, Perl, SQL, NoSQL. RDBMS(Oracle, Postgress, MySQL). Strong data analytics skills.**

Formal training: **Cisco CCNA**(2009), Harmonic **Advanced Digital Video System Optimization**(2007), **OOA/OOD** and **Software Engineering** at Georgia Tech Continuing Education Department (1999).

**December 2016 - present**

**DirecTV/ AT&T Entertainment Group**

***Consulting Principal Technical Architect***

Responsible for design, coordination of integration and implementation of solutions for next generation OTT/ABR video architectures. Extensive integration experience with Ericsson, Cisco, Harmonic video pipeline solutions. Daily work with HLS, DASH implementations from Satellite/Terrestrial ingest to client/subscriber delivery. Subject matter expertise in the video space. Agile/Scrum environment, extensive use of Service Now , Jira, Confluence and other collaboration tools for project management liaison. Heavy use of Python and other development tools for prototyping and creation of frameworks for automation of integration, testing and operations procedures.

**August 2014 – December 2016**

**Katech Inc. (self employed)**

***Consulting Engineer***

Extensive integration and solutions architecture, sales engineering and project work with major MSO’s i.e. **Comcast, Charter, Cox, Verizon** and vendors i.e. **Harmonic, Tivo and Aspera.** Big data mining and analytics using Oracle and SQLserver., Apache Hadoop. Authorship of White papers, Methods of Procedure, requirements. Use of development tools i.e. Jenkins, Github , Jira , Java, Perl and Python. A focus on architecture and implementation of solutions.

**August 2012 – September 2015**

**West Valley Engineering Inc.**

**Sunnyvale, CA**

***Sr. Engineer(contractor)***

Field service, support and engineering services for Harmonic Inc. on a contract/retainer basis. Extensive work with VOD, encoders, groomers and Video real-time encoding systems. Designed implemented and managed a professional services solution for Comcast (Harmonic Inc. customer) involving video content ingestion for OTT video delivery.

**May 2005 – August 2012**

**Harmonic Inc.**

**San Jose, CA**

***Staff Sr. Engineer***

Worked on a wide range of projects, including long-term international projects involving multiple spoken languages and differing television standards.

Involved in a variety of duties, including Field & Sales Engineering and complex systems integration. Significant work with MPEG encoding/transcoding and streaming software and hardware. Deployment of VOD and capture solutions inCisco/SA(DNCS), Motorola and hybrid headend environments. Integration work with ISA/OpenStream, and NGOD.Detailed analysis of MPEG transport streams and diagnosing/resolving complex high-performance networking(layer 2 -4) issues in the context of video capture and delivery. Other tools and products used include IPTV DRM systems (Verimatrix, Latens, Widevine), IPTV BMS and middleware systems (Myrio, Minerva, NDS, Openstream, Quative etal), Oracle, Bash, Perl, windows command language.

**March 2003 - May 2005**

**N2 Broadband Inc.**

**Duluth, Georgia**

***Team Lead for Professional Services***

Technical lead for 6 person staff providing product support, software customization and consulting services for the digital CATV industry. Team leadership responsibilities entail resource allocation, professional development & mentoring, authoring of quotes, Statements of Work and detailed requirements/design documents. Frequent customer facing with an emphasis on support and identifying potential product and/or consulting services sales opportunities. Daily hands-on programming and system administration using Java J2SE 1.3-1.4, CORBA, Python, Perl, bash, Postgres SQL, Oracle 8i and various gnu tools in Linux and Solaris environments. Extensive CATV specific product knowledge: DVB, MPEG, Pegasus ISA, Scientific Atlanta DBDS/DNCS, Motorola HMS, HFC traffic management concepts, Pioneer Showrunner/Passport, Scientific Atlanta xOD/Sara.

***Senior Software Engineer (Consultant)***

C++ and Java development of Pegasus-ISA compliant server components under Solaris 8. Utilizing J2SE 1.4 SDK(NIO), CORBA , gnu toolset(g++, gdb .) and Apache components i.e. log4j. Extensive mixed language network programming as well as Oracle 8i programming using JDBC.

**October 2001- March 2003**

**BellSouth.Net**

**Atlanta, Georgia**

***Senior Software Engineer (Consultant)***

Responsible for designing & implementing custom internet services for DSL customers including Instant Messaging, VoIP, teleconferencing and e-mail. Responsibilities include extension and customization of the Jabber Commercial Server entailing the design and implementation of external multi-threaded processes and shared libraries. UML design work utilizing Rational Rose CASE and design patterns(Singleton, Factory, Memento & Composite) and the authorship of design and research documents.

**July 1999 - October 2001**

**Scientific Atlanta**

**Lawrenceville, Georgia**

***Senior Software Engineer (Consultant)***

Design, implementation and maintenance of software components for network command & control (**DNCS**) of Digital Video Broadcasting head-end components (QAM/QPSK modulators) using C++, Rogue Wave Tools, Informix RDBMS with Persistence and Orbix under Sun Solaris 7 & 8. OOA/OOD with Rational Rose CASE. Server components utilize multi-threading, RPC, events & messaging, load-balance & queuing algorithms, Primarily focused on control of MPEG2 DVB & ATM networking protocols. **DOCSIS and CMTS**, member of a team researching embeddded Linux as an STB platform. Performance of code reviews, authoring of design documents and presentations to groups of mixed technical backgrounds.

***References and salary requirements available on request.***