



Summary

Santosh brings about **20 years of experience** in leading architecture and development of **large distributed systems**. He has built **carrier grade telco products** that scaled to millions of users even before the emergence of cloud. Having started programming since the age of **15 with GW BASIC**, he has knowledge encompassing wide programming platforms from **C++ to modern programming languages like Java, C#, Python and JavaScript**.

His experience as an architect ranges from **Service Oriented Architecture design paradigms** to modern day **multi-tenant SAAS based cloud architectures and Mobile Architectures**. He is passionate about staying afloat of technology and today spends most of his time **consulting with North American customers** and spearheading his inhouse **AI and ML based products**.

His area of delivering solutions has possibly encompassed every platform from **Java, .NET, PHP to Mobile platforms such Android and iOS**. He is also constantly sought after for speaking on wide variety of topics. He is often looked as a great bridge between top level executives and high performing development teams.

Expertise

- | | |
|---------------------------------------|---------------------------------------|
| ✓ Enterprise Architecture and Design. | ✓ Distributed Architecture and Design |
| ✓ Business Process Engineering. | ✓ Cloud Architecture and DevOps. |
| ✓ Product Development and Marketing | ✓ Mobile Architecture |
| ✓ Customer Partnerships and Relations | ✓ Agile and Scrum Methodologies. |
| ✓ New Customer Acquisition Expert | ✓ Project Management and Delivery. |

Key Accounts



Played the role of Account Manager/Solutions Architect for the above customers for large scale projects engaged.

Work Experience

Impiger Consulting Services (04/16 – current) Sr Director Architecture

- > Spearheaded the consulting division for the company by leading onsite **Solution Architecture** consulting for large enterprises.
- > Provided a **hands-on** approach by creating several **POC's** and **Pilot** engagements to win customer confidence.
- > Helped the company transform itself from **Boutique App company** to an **Enterprise solution provider**.
- > Forayed the company efforts to be a leader in **Cloud Application** and **Cloud Migration** projects **Azure, AWS** and **Rackspace** cloud.
- > Created a blue print for large **Enterprises to successfully move their work loads to Cloud**.
- > Played a key role in acquiring **Applebees** and **iHop** accounts as **Presales Solution Architect** and also played **Solution Architect** for their large scale **Sitecore** project on **Azure** platform.
- > Migrated, consolidated and unified a large company's multisite on-premise **Java-Spring-Hibernate-Struts** application on **Azure** cloud creating a **1 Million** in saving per year.
- > Directly reported to the **CXO** group of for large customers articulating project status and roadmap time to time.



- > Helped a startup **Q-Trak** with **scalability and performance** issues by playing the role of **CTO** for them. Identify several platform issues with the **MongoDB** service provider and migrated data to a more suitable **data store**.
- > Played the main point of contact for Marketing CXO's for technology evangelism and service offering packaging.
- > Key **advisory** across the company on all matters of **Software Design and Architecture**.
- > Constantly sought in the matters of identifying **performance bottlenecks** in large systems and providing solutions without affecting business continuity.
- > Responsible for **P&L** and **budget** tracking for projects managed and played Architect for.

- [Impiger Technologies](#) (2010 – 2013) *Director, Software Development*

- > Architected and Lead the development of **EvidenceLibrary.com** for **WatchGuardVideo** based out of Dallas on **Azure Gov Cloud**. Responsible from requirements gathering to delivery and making sure the project was executed within budget. Solution based on **.NET MVC 5**, **Telerik's controls** and **Azure PAAS Websites and Web Jobs**.
- > Architected and led the conversion of a successful legacy product for **Asset Management** from **WaspBarCode LLC** to a **multi-tenant SAAS** based product hosted on **Azure**. Trained a combination of onshore and offsite engineers on **Git workflows**, **DevOps** and **.NET MVC 5** with **Entity Framework**.
- > **Built a Streaming Media Player** for **Android** based conferencing solution from **AMX** called **ENZO** - <https://www.youtube.com/watch?v=bjxzU-tTmPQ>. Support for **HLS** and **RTMP** protocol
- > Technical Lead for the **Google** account for **QuickOffice** suite of products on **iOS** and **Android**. Ported custom versions of the **Android Kernel** to custom **Tablets Devices**, locking up several options to provide a hardened OS for secure business applications.
- > Wrote a custom **ascii** based protocol moving away from **Json** and **xml** for a Mobile Application that had to send **Realtime** status updates for an Application for **Intel** that was **battery** and **bandwidth** efficient.

- [SALESDIALERS](#) – [Impiger Technologies](#) (2009 – 2013) *Director, Software Development*

- > Architected and built a **voice broadcasting solution for running Voice campaigns** for telemarketers.
- > Architected the solution to be **cloud based**, on a **SAAS** offering.
- > Customized several modules of **Asterisk** soft switch to support unique features required for voice campaigns.
- > Wrote the management engine in **C++** that managed outgoing calls to available voice channels.
- > Oversaw the development and design of the **U/UX** of the CRM.
- > Introduced best in the breed development procedures creating individual **Test**, **QA** and **Prod** setup on **Rackspace cloud** with separate **CI** plans.
- > Managed product development and road map using **scrum** and **agile** methodologies.
- > Created effective support teams and tools with escalation matrix.
- > Developed and introduced a self-test for diagnosing **VOIP** quality issues.
- > Catapulted the product to one of the top **Predictive Dialers** in the market until date with 1000 customers generated several 100 calls concurrently.



- **PRODEA – Impiger Technologies (2006 – 2009) Director, Software Development**

- > Managed a team of over 60 engineers in developing the next generation **Residential Media Gateway**.
- > Technically lead a team of embedded C++ engineers and took ownership of the underlying platform framework for communicating with North bound Management servers.
- > Researched and published a white paper on the most efficient means of inter process communications on a relatively new flavor of linux which included **shared memory, raw sockets and Unix domain sockets**.
- > Developed a subscription-based Media Engine for the box that integrated with **Hulu, Sling and Pandora**.
- > Led several projects for a couple of projects that transformed from a prototype box to a carrier grade Residential Home System that could be deployed by telco's.

ITOKK Inc – Packetera Communications (2004 – 2006) Director, Software Development

- > Managed a team of over 60 engineers in developing the next generation **Residential Media Gateway**.
- > Architected Packetera's **N-Point SIP stack** framework.
- > Implemented features of **SIP RFC's – RFC 3261, RFC 3284, RFC 3286, RFC 3315, Firewall Traversal – STUN, ICE, TURN, RTP/RTCP, RTP-Proxy**.
- > Lead a team of C++ engineers in developing **SIP stack**.
- > Segmented teams among core Sip stack team, Media Development, User Agent SIP Frontend team.
- > Mentored and created a QA team proficient in testing prominent **Sip stacks** and UA's.
- > Tested and Deployed Sip based Softphones in the networks of many prominent service providers across the US and Canada. Created a suite of proprietary interoperability tests.
- > Deployed Softphones in the **White House** co-branded with the logo of the '**National Security Agency**'.

PLAYSPAN Inc – (2005 – 2006) VP, Engineering

- > Played the role of Architect/VP Engineering for PlaySpan during the prototyping phase which eventually got acquired by **VISA** for **\$190 Million**.
- > As an architect built the prototype for this platform for phase I with fully functional backend and mock screens.
- > Owned several key modules and contributed as a full stack lead developer using **Java, Struts, Hibernate**.
- > Lead and worked with a team that was geographically distributed across time zones.
- > Developed an **Anonymous Remailer** component that worked as a plugin for Sendmail server. An anonymous remailer is a server application which receives email messages with embedded instructions on where to send them next, and which forwards them without revealing where they originally came

MERCK - PRIME TECHNOLOGY GROUP (2003 – 2005) Technical Architect

- > Planned and Architected the successful migration of the **MerckIMPACT.com** a group of 12 portals from **Cold Fusion/Oracle to .NET/SQL Server**. Architected the complete solution using **Microsoft Content Management Server** and **.NET/SQL Server**,
- > Designed and implemented the content and data migration aspects of the project. Integrated **ActiveDirectory** for **Single Sign-On**.
- > Responsible for internal and external application development in support of Clinical Trials and Enterprise Systems.



NUERA COMMUNICATIONS – Think Business Networks (2000 – 2003) Software Engineer

- > EMS/NMS Domain Engineer – Specializing in **Distributed Real time Fault Management systems** for Several Switches/ Media Gateways and Session Border Controllers based on **C++, Java -RMI** and **EJB's**. Solely responsible for implementing **FCAPS**.
- > Designed a system for listening to **SNMP traps** from a farm of devices and propagating them to multiple systems.
- > Designed **CORBA based system**, interfaces resulting in compiled stubs/proxies for remoting.
- > Designed the very first **Web/Http based distributed Fault Management System using Servlets and Object serialization**

Recognitions

Consistently awarded **Top Contributor Award** for several large engagements.



Recognized and inducted in the invitation only prestigious **Forbes Technology Council**.



Serve on the board of **Business Intelligence And Analytics** forum

Speaking

- > **“Secure Media Access on The Cloud”** – CloudExpo, SantaClara, California 2016
- > **“Strategies of Effective Digital Engagement”** - Dallas Tech Summit , 2017
- > **“Data Scientist Approach to Marketing”** - The University of Texas Dallas 2018

Contribution



Contributed to **SIP TORTURE TESTING FRAMEWORKS**

Skills & Certifications

- > **Solution Architecture, Security, Microservices and Distributed Cloud Architectures, Data Systems and Data Lakes, Azure, AWS, Rackspace, Heroku and GCP**
- > Sun **Certified Java** Programmer and Microsoft **Certified C++** Programmer

Education

- > Advanced Diploma Network Centred Computing – National Institute Of Information Technology (1998)
- > Bachelor's in Accounting, Mathematics And Computer Science – Bharathiar University – (1996)