

Prasanth Janardhanan

OBJECTIVE:

15+ years of hands-on software development experience. Currently focusing on building high-performance systems using Go lang and Kubernetes. In the past, worked on refactoring codebases, performance tuning cloud-based systems, and building SAAS and desktop products. I have experience in web, cloud, as well as embedded systems, worked with many programming languages from C/C++, Python, Perl, Bash scripting to Typescript. I do hands-on coding and troubleshooting for the projects that I am involved in.

ACCOMPLISHMENTS:

- Experience in architecting large software projects
- Problem solving and technical leadership
- Experience in broad variety of software projects- embedded systems, UI based applications, Mobile applications and Web Applications
- Played the main role in designing and building an energy-efficient estimation system for HVAC (Heating, ventilation, and air conditioning) research department of LG electronics
- Associate Architect in building an industry-standard integration system for EFI
- Built a stream processing system for handling large PDF files with more than 4 GB using a multi-threaded decoder with limited memory and limited storage
- Built a fast video builder for an educational software tool.
- Architected a system for streaming live repair and maintenance sessions to a centralized dashboard.
- Built custom programmable add-on systems using custom-built script parsers

SKILLS:

Languages: Go, C/C++, PHP, Javascript, Typescript

Technology Areas: Embedded systems, System programming, Linux, Kubernetes

OTHER

- Certified Kubernetes Administrator (CKA)
- Certified Kubernetes Application Developer (CKAD)
- Recent Articles: prasanthmj.github.io
- Projects: <https://prasanthmj.github.io/projects/>

EMPLOYMENT HISTORY:

1) Simfatic Solutions

[<https://simfatic.com/>]

Tech Lead

March 2009 – Till date

A) Live GPS tracking of vehicles

Project Description:

The project was to track the live locations of fleets of trucks with the help of GPS attached to the vehicles. The Dashboard provides the live locations and also predicts the time to reach the destinations. The collected data was also used in planning and estimation as well as to avoid predictable delays.

Responsibilities:

Requirements gathering, evaluating technical solutions, managing the development and further maintenance of the system

Environment:

Go lang, VueJS, Postgres, Kubernetes

B) Live video streaming platform for an Industrial application

Project Description:

This project was for a telecom tower construction and management company. The construction and repair of the equipment were live streamed to a dashboard from the camera on the head gear of the work men as well as other cameras on the site. The supervisors at company headquarters can view and send instructions based on the video streams on the dashboard. The application also included archival options for the video streams for record keeping

Responsibilities:

My roles included requirements gathering, evaluating technical solutions and architecting the best solutions.

Environment:

Go lang, React JS, Postgres C++

2) EFI India

<http://www.efi.com/>

Associate Architect,

April 2004 - Jan 2009

A) Common Software Integration Platform

Project Description:

EFI's product range includes MIS systems and large print units. There are more than five MIS products in different platforms. The Fiery software is used in large scale printer units worldwide. Integrating the auditing/stock and usage information from Fiery units with the MIS systems will largely help the print shops. JDF (www.cip4.org) is an industry standard for transmitting job information between systems.

The Common Software Integration Platform is a service that integrates with the Fiery software to integrate the devices to the MIS systems. The CSI Platform need to be platform independent and should only have a minimal footprint since the service need to run on embedded Linux based devices as well.

Responsibilities:

Architect , co-ordinate the groups

Environment:

C/C++/Linux/ Windows

B) UPDL Re-architecture

Project Description:

EFI' Fiery software is used in large scale printer units worldwide. The UPDL (UPDL stands for Unified printing languages.) module is responsible for parsing different types of input files (PS,PCL, PDF etc) for printing and creating raster output from the input files. The module was using legacy code from different sources, including that from third party vendors.

The project was to re-architect the component such that the structure is more modularized. The code was better structured so that the individual modules could be tested at granular level. In addition, the new structure made it easy to do modifications and to add new features.

Responsibilities:

Architect for the new system

Environment:

C/C++/Linux/Windows

C) JDF Connector

Project Description:

JDF is the print industry standard for sending and tracking print jobs. The JDF ticket gets created on a JDF agent like Print MIS systems and gets routed to the print controller devices. As the job passes through the various stages of completion, the corresponding information is added to the ticket (like the auditing information). Once the job is complete, the ticket gets routed back to the MIS. MIS uses the information in the JDF ticket for costing.

Responsibilities:

Architect of the product.

Environment:

C/C++/Linux/Windows/wxWidgets

3) LG Soft India

[\[http://www.lgsoftindia.com/\]](http://www.lgsoftindia.com/)

System Analyst,

October 2002 - April 2004

A) MMS/EMS client

Project Description:

The project is to develop MMS/EMS client for the new LG mobile device. Layered architecture is used so that the same client could be adapted for other models also. The MMS client includes composer, player, message box db, network abstraction layer, and the device abstraction layer.

Responsibilities:

Develop the Device Abstraction Layer first on PC for development, and then on the device for integration.

Design and develop the decoders on the device for image formats like JPEG and GIF.

Environment:

C/C++/Visual C++/ARM developer suit

B) LG One Stop Quotation System

Project Description:

The client for this project is LG Digital Appliances lab.

Project is to develop a CAD software tool for designing the Air conditioning system for large buildings. This software product can handle from load calculation to equipment selection to the final quotation for the building. The software has a graphical component for designing the building. Based on the design of the building, the software can calculate the heating and cooling load of the entire building. Using the simulated load data, the software automatically selects the A/C equipments required for the building. Also, it can automatically draw the refrigerant pipes, power wires and control wires between the equipments. The equipment selection UI helps the user to modify the selected equipments and to modify the pipes. Once the equipments are selected, the performance correction formulae are applied to correct the performance factors. Using the equipment selection and piping data, the software generates the complete quotation with detailed pricing information.

The software is developed using MS Visual C++ and MFC. The large software modules were divided into COM components for improved modularity.

Responsibilities:

Team Lead for the Graphics component team (6 members)

Participated in System study, Architecture & High Level Design

Environment:

C/C++/ MFC

EDUCATION:

BSc Computer Science Mahatma Gandhi University March,1998

PERSONAL DETAILS

Name	Prasanth Janardhanan
Date of birth	15th February 1977
Sex	Male
Marital Status	Married
Nationality	Indian

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