

Current Employment:

Consultant at Peer Water Exchange

Since **Jan 2018**

The organization is NGO working with corporates and other NGOs in managing funds and the respective projects been executed. The the main focus is towards water and sanitation projects in urban and rural South India. I am responsible in managing the entire technical infrastructure of the servers and the websites. The setup here is mainly Ruby-on-Rails on Amazon EC2. I work here remotely. These days working on upgrade of the code from RoR 3.2 to 6. Have reached 48% code coverage and massive refactoring has been done in the codebase and database structure. This will help in the new features that have been planned. Also working on porting the React Native Android app to AndroidX and new API calls. <https://peerwater.org>

Founder at FindMyGov.in

Since **August 2017**

A personal project which started as a form of activism. The project geolocates the visitor in India and presents it with all the elected and appointed staff that belongs to that location. It helps the visitor with direct contact details like email address and phone numbers of the government staff. It is a means to help citizens take control of their own staff that is supposed to be working for the benefit of the citizens. Since most citizens in the country don't know much about the staff responsible for any of their civic problems, it tries to bridge the gap. I collect this information from all public sources and websites. I also fetch this info through RTI (Right To Information). It is an on-going project. It heavily relies of massive amount of data that is shown correctly based of village/ward/city/district and state levels. The project was written in PHP Framework Yii 1 and now migrated to Yii 2.x. It is operating in 6 different languages with the help of gettext. <https://findmygov.in>

Founder at Pronity

Since **November 2016 till August 2017**

Here I started working on a project management system for the Construction/EPC industry and created simpler system to manage site updates. It allows the head office to monitor progress at the construction site. Construction Managers send updates using react frontend apps with pictures. A report is compiled using all the updates received by end of day for distribution. The product itself does not design any construction project, it is generic in form to support most types of construction projects. I wrote entire the application on using Yii1 framework and reactjs frontend. It has also incorporated jest tests with simulated APIs to match API specification written in swagger. This was my first code in reactjs. I had to choose between angular and react. Reading about some evolution issues with Angular releases, I chose react. I cannot call my self very experianced in reactjs. Just moderate and loves the challenges.

Previous Employment:

CTO and Co-founder at Digiscend, Peru

Since **May 2014 till October 2016**

In Digiscend we were creating products for construction and engineering contractors working for Mining and Energy companies in Peru. We collect data of projects done by contractors and organize it making it usable and searchable. Thereafter creating our commercial products. I started this venture with a partner in Peru. I am the only programmer doing all development on this platform. Primary development is based on PHP/MySQL. Uses Wordpress for many tools used on the website. We also did OCR of massive government data sets using tesseract-ocr, Perl and bash script. We are using linear regression algorithm for machine learning cost estimation. Content work is handled from India and Peru. Data is also collected from customers in Peru and India.

Chief Technology Officer at Inside Investor, Malaysia/Philippines

Since **May 2012 till April 2014**

The primary domain in this company is Financial and Investment publications for the ASEAN and middle eastern regions. I am responsible in maintenance of existing software setups and servers in the company. I am also hands-on programmer in developing all the softwares being used, internal and external. I participate in all aspects of technology planning and execution. Major products developed here are based on content and I develop, improve and maintain all content management systems being used by all teams. I have to work together with the editorial, marketing and operations teams in helping with their requests and software improvements. I report to the CEO and the COO of the company. All code written here uses open source software. Code is under a continuous testing and monitoring system. We also work following the agile principles of software development. Also in development are some cutting edge content based products that can help our customers get information most refined manner. <http://www.investvine.com>

Product Manager at Hotelogix

Since **Dec 2010** to **May 2012**

This employment had shifted me to the hospitality domain. [Hotelogix](http://hotelogix.com) is a Property Management System. It is a SaaS application on cloud. The development team is based in Noida, India. As a multi lingual web based product serves to hotel owners/operators across the globe. The hotel operators use it to manage entire properties in all aspects of the business. I joined the company HMS Infotech Pvt. Ltd. in Nov 2010 as a Product Manager. I was responsible for the entire technical arm for product. I enjoy playing many roles here. Working as a team leader, as a hands-on programmer, QA team leader, Amazon Web Services maintainer and as Architect. To balance between market demands as well as very importantly to continue to scale the product in customer transaction volume, security and stability. Hotelogix is the first web application of its kind and even more running on a cloud. Being at that edge, innovative means to improve the product is a continues process. Have also been busy setting up a complete automatic integration system on the development process. The CI allows to refine the software coding practises and also to bring a stronger predictability. Product is also a victim of the startup rush that is common in the industry. Therefore clearing up the Technical Debt is always a challenge. Also been training the team in better coding practises and how that helps to achieve a happy floor. Hotelogix has been developed using open source software. <http://hotelogix.com>

President-Technology Team at Educomp Learning Hour Pvt. Ltd.

Between **May 2007** to **Dec 2010**

The company is a subsidiary of [Educomp Solutions Ltd \(EDUCOMP\)](http://educomp.com). Educomp is a globally diversified education solutions provider and the largest education company in India. Educomp Group reaches out to over 21,000 schools and 10.99 million learners and educators across the world. Working with [Educomp Learning Hour Pvt. Ltd.](http://educomp.com), New Delhi. Joined in May 2007 as a Project Manager and got promoted within one year as President-Technology Team. I am responsible for the entire technical arm for software development. The primary project is operating the software of the education portal as well as the offline servers installed in tuition centres. Supporting real-time virtual software driven classrooms using the web as well as supporting the offline centre using digital content delivered within the classroom from the local servers. We have managed 9 intensive server systems located different places in New Delhi and Ludhiana. Also managed entire HR and business data within our single system. All software has been developed from scratch in 2 years using one hundred percent open source software. <http://educomp.com>

Project Lead at Caneum India Pvt. Ltd.

Between **Jan 2006** to **May 2007**

More Information available on request.

Tech Lead at Woodapple Interactive Pvt. Ltd.

Between **Feb 2005** to **Jan 2006**

More Information available on request.

Partner at Blueage

Between **August 2012** to **Feb 2005**

More Information available on request.

Programmer at Pitara Kids Network.

Started from November **2000** to **July 2002**

More Information available on request.

Core Competencies and Projects:

The technologies written below are not just there for I am aware of them but that I have worked with them in production environment during my career. References are available on request.

Platforms:

Linux

Since 2007 Linux is the primary operating system on my desktop. Developed a few **native console socket clients**. **Contributed to Gnu Planner GTK Open Source Project**. Worked with cron and other more than **general linux server administration**. Have managed our servers and implemented lots of **automated services within linux systems**. In March 2009, I also **setup a full tiles@home OpenStreetMap Server** and rendered on my Ubuntu. I'm a OpenStreetMap **surveyor** and have been contributing the OSM project for past 1 year. From Jan 2011, started managing linux servers within **amazon cloud**.

Windows

Was once a primary OS of my experience though not at all a fan of. :) I know all the internals of windows since I come from a **VC++/ Win32 Platform SDK background**. This knowledge is kind of not easy to find. Basically **can administer both generic Windows XP and Windows 2003 servers**. A good grip and user of all **sysinternal tools** (process explorer, regmon, filemon).

AVR (RISC based Processor) Programming (ATmega8535)

Have developed many types of **simple circuits all communicating with the computer via RS232/UART**. Implemented a **real-time temperature logger** that used the ADC of the ATmega8535 to convert temperature to centigrade and send to computer. In March 2010 started work with Arduino development board and some new ideas. In Sep 2011 created animation on LED matrix only using arduino and without using any driver ICs.

OSX

Started with Mac in late 2012 and is currently my primary development station. Have done iOS development as well on this station.

Languages:

PHP 7

In early days of my career had made many web sites running on PHP and on both Windows and Linux platforms. So is a fantastic total CRM solution. Made an entire automated test and upgrade system using WATiR, PHP and Perl. Made a fully customizable CRM in PHP for multiple departments of the company. Made a new customizable Mysql DB sync system for multiple database installations. Created a new realtime status monitoring, control and maintenance system on XMPP channel with RSS feeds.

Since 2007 been working on good products made on PHP. First it was about education domain, then hospitality and now its the financial sector. Every product has been unique and challenging in its kind. There have been cases where I reached end of available knowledge and had to invent a new solution many problem. Later documented this in my blog for others.

Migrated the entire Digiscend code to php7 with some changes within two months of production release. The speed increase php7 was the biggest feature achieved.

Perl 5.8

Wrote thousands of tiny scripts which could either **parse a text document, gather data from a web site, run as a thread from a VC++ application**. Used regular expressions, database and file handling functions in Perl. **I can write cryptic looking Perl /REs/**. A large part of a **remote automated server reporting/RSS feeds and health chats on XMPP** are based on per scripts.

Ruby/Ruby-on-Rails 3.2/5.2/6

Had worked on RoR few years back and back to it with the current employment. Also have done few hacks around Redmine, which runs on ruby-on-rails framework. Like in PHP practising TDD in Rails as well.

VC++ 6.0

Visual C++ has been my best development platform of all times and have taken care never to loose the touch. Have worked on possible all aspects of **win32 core API** in past 6 years. Invented some nice **IPC with Perl and SDI**. Just this month (June 2009) created a tiny (under 50 lines) **win32 GDI APP to hook Windows Terminal Services notifications**.

Windows Sockets

Have **made complete HTTP and FTP server. Multi-Server scanners** which could scan any open SMTP, SOCKS and SQUID proxies. Chat servers and clients, multi-user game clients, File

Sharing application and network packet sniffers I have complete knowledge about **HTTP (rfc2616)**, **POP3 (rfc1939)**, **SMTP (rfc821)**, **TELNET (rfc854)** and **FTP (rfc959)** protocols.

MFC

Simple **Windows UI applications** which have client threads to interact with or monitor the running session. Advanced network applications using Windows Sockets. Peer to Peer applications and file sharing tools.

Direct X (DirectDraw and Direct3D)

Developed a **simulated console game** which was using **2D DirectDraw API** for rendering.

Microsoft .NET

ASP.NET

Have developed and deployed at least a dozen of applications and managing a few sites.

C#

It's a interesting language. Have written all the .NET web application codes using **C# language and using OOPS** for library creation and usage.

VB 6.0

Have made business applications like **Rental Manager, Pharma, Cheque Printer**. Some tools like **drop down banner generator, Newsletter Composer**, HTML Template generator and **Stock exchange data Analysis**. In experience, **Visual basic comes on the second spot after VC++**. Recently (Jan 2009) also created an **automated biometric RFID log reader** to gather and send student attendances to online website (non real-time, due to network outages).

ASP 3.0(and .net) with IIS5+

Wrote thousands of pages of ASP code for handling either accounts, **port a Microsoft Access Application and as web applications** on a windows server and even personal image libraries and planners. **All aspects of the classic ASP are known**.

Web

XHTML 1.1 and HTML 5

Have made web pages in **XHTML 1.0, HTML 4.0 and HTML 5.0** complaint. Completely **TABLEless pages** which only use **CSS** for entire rendering of the page. **Search Engine optimization** have

also been my area of interest and have known to optimize pages and **track spiders and their visit schedules in advance**. A 100% **browser compatible guarantee using the latest standards**. All HTML that I write is strict XHTML complaint.

CSS

These days my expertise in CSS surprises me. Specially where programmers are not expected to be CSS pro. But that I am. A big fan on csszengarden. Believe writing CSS is itself is an art of art. Have worked with CSS to bring a whole web site under control for any design changes. Used CSS for complete layout handling of website without use of traditional HTML TABLE Tags. Have a very vast experience in CSS. Has become my habit to make sure that HTML is inherently written in CSS and not the classic manner.

AJAX

I believe only if one knows the complete physics of the HTTP protocol can he/she understand the simplicity of AJAX. That knowledge will not only help in architecture but also in making it secure, stable, testable and debuggable. In early days had developed too snippets in AJAX directly both on PHP and on dot net platforms. The drivers were written in small AJAX stubs to **optimize the loading times** and shopping experiences of users.

Javascript

AJAX pros always need Javascript to do the second magic on the html. Worked with JavaScript for implementing simple web forms logic or advance presentation players. Had full support for DOM for both Microsoft Internet Explorer and Mozilla rendering engines. programmingParadise was a dynamic, centrally controlled site made 80% in JavaScript when my linux server only allowed static HTML files.

JS Apps and ReactJS

Started working on reactjs in May 2017 on the civil construction management project. That was also my first intro to nodeJS. Although I have a very good experience in working in legacy JS apps, node architecture was a new one. My first Javascript app was my own website programmingparadise.com (1999, see webarchive) which was fully written in Javascript. Written many games, calenders and tools along the way. Notable is also a full standalone presentation player written in JS for Gillette India.

Bootstrap3

Have done lot of frontending with bootstrap though I don't qualify as a designer and don't claim to possess those skills either.

cPanel X

Managing multiple linux web sites using cPanel content panel including my own.

VRML / X3D

Been working on a self project into convert Openstreetmap data into a VRML scene. Been learning the X3D terms along while developing the code.

SVG

Have done some introduction work in SVG which involved in making a circular genealogy chart for another self project. The code was done perfectly. Also in March 2010, developed a new way of generating PDF documents using SVG. Blog link on request.

D3

Just started writing some D3 charts for my own genealogy application. It helps track the entire history of a family. Presents the data in 4 different types of charts.

Amazon Web Services

Have worked with both S3 and EC2. Have gained expertise in setting up entire server network on cloud and even maintaining it. Have created tools in Perl and PHP to conduct automatic remote maintenance actions on server instances

Docker

Have used docker for some of my recent projects to easily create and distribute dev and test environments. Still working on composing complex environment with multiple images.

Assembly (Intel x86 Instruction Set)

Wrote a few TSR's, AVR code and inline assembly in C programs. Have also worked with the Z80, RISC and *nix instruction syntax. Also, runtime debugging on Windows with just msdev and no source code requires you to read loads of CALLs and JNEs. Have tweaked a few software binaries as well.

Java 2

- **JSP on Apache Tomcat** in 2005
- Java classes using **Lotus Notes API** in 2004
- Applets in 1998
- Have contributed to **J2ME [MobileTrailExplorer](#), a Google Code open source project in 2009.**
- Retouched java after a very long time when started Android development in July 2016

Lotus Notes programming and Domino

Development for Gillette India onsite using their corporate Lotus 6 platform. The project was for a duration of 4 months at the Gillette office, Gurgaon. It included using multiple API calls for different services. Details on request.

Databases:

MySQL

Almost all database driven website's written in PHP were using MySQL for storage. Used MySQL to also export stock exchanges' closing statistics on daily basis from a central MSSQL server to web which runs on Linux. Have not yet tried procs or relationships with v5. All my servers are still on 4.x. phpMyAdmin has been used always including occasional command line client. Have worked with Mysql for the longest time.

MongoDB

Used mongo DB to store a particular type of data that allowed distributed storage and faster searching using complex algorithms.

MSSQL

Most recently made the database for the entire BSE closings since Jan last year. Supports extreme analysis on all stocks on daily basis. **Another one to be pro in.**

Microsoft Access

PostGRES SQL

Source Repositories, Testing and Management

Redmine

Personally think, redmine beats most issue trackers. The hackable simplicity of RoR, too many plugins and most importantly, its database and close integration with subversion make it my favourite. Its Trac in all means and much more. Have developed integration of redmine with Yammer office network suite. The integration got all source code and ticket updates into yammer time line. That helped various departments measure and get updated with progress in interested projects.

Trac

Have worked with Trac for all 3 years years. Have linked the subversion (SVN) repository within trac.

Subversion (SVN)

May not be preferred by some pros (LinusT, etc) over Git, subversion is good in most ways for small to large projects. Got introduced to subversion in 2006 and immediately replaced it with existing CVS or Visual Source Safe for new projects. Have understood and done most operations includes branching-merge, blaming and organizing. Also been using SVN for source code deployments. Also developed a automated PHP syntax checker for SVN commit hooks. The hook tries to have some stable code in the repository.

Git

Now a regular user of Git for manage 100% of all my projects.

Bugzilla

Have used bugzilla for 3 years before shifting to Trac. Its a great bug tracking and task management tool.

WATiR Automated Testing

Have written automated test scripts in ruby and using WATiR for testing. The test scripts included all the user actions and even assertions to validate each behaviours of the web page is as per the defined UI. The test system was integrated to SVN repository and therefore was able to continuously test each new commit and flag them successful.

Testcase Development

Have written test cases for most web application projects and used them manually to test the application in certain times. Except WATiR there was no other automatic test generation tool that I have used. WATiR also does not compose test cases automatically but have to be programmed in ruby.

Unit Testing and Integratiion

This is exclusively a late 2011 phenomenon. Yes, this looks like a confession. Addicted to it now. Understood about it when SebastianB came to [osidays2011](#) and gave talk on PHPUnit and similar topics. TDD (Test Driven Development) and Ci (Continuous Integration) are now understood and practised everyday with me and my team. No exceptions. The benefits are just too good. Heavily using phpunit in Digiscend as part of TTD.

Content Management Systems

Wordpress

Have created themes in wordpress along with respective widgets.

Followed the wordpress coding guidelines and used the given API for development. Also integrated wordpress into Yii framework as a menu and content driver. Also integrated with wordpress to fetch posts using API. Have enjoyed using the API as it has great level of customization capabilities.

Ezpublish

Used ezpublish to store high amounts of content. Used direct database access of ezpub to read content and transport it into Yii frontend. Used custom fields and varied type of content store and fetch from ezpublish 5.

EpiServer

EpiServer is a content management system from Sweden. It has been deployed on NASSCOM (India's Software Companies Association) website. I leading the team of 6 people for a duration of 4 months to convert the existing content of NASSCOM into EpiServer. The server is written in C#.NET and support all the functions of existing CMS and designs.

Joomla

Deployed Joomla on my current employment's website. Integrated our application within Joomla and got a Dynamic Javascript driven website. I was leading a team of 4 people for a duration of 3 months for this project.

Teamwork

It is a in-house Content Management System while I was working with Woodapple Interactive Pvt. Ltd. It has been used to serve content to multiple corporations in India include HCL India. The Cms is written in ASP3 and .NET technologies

Typo 3

Had studied the Cms for a short duration while I was working for Caneum India Pvt. Ltd. It is written in PHP and supports its own typo-script technology.

Education:

Did a 3 year Advanced Diploma GNIIT Course from NIIT in 1998. Also did my graduation as BCA 2013 from Alagappa University, Karaikudi, Tamil Nadu, India.

Other Interests:

Available on request.

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