

**Summary** Self-motivated individual with over 2 years of experience in Systems Integration Engineering and programming. Esteemed to work on Free/Open Source Software.

**Professional Experience** **International Institute of Information Technology** *Project Engineer*  
Hyderabad, Andhra Pradesh *2011 July till date*

**Description:** Virtual Labs is a mission mode project funded by Ministry of Human Resource Development(MHRD), India. Professors and students from various institutions in India develop labs based on various courses. The goal of our team is to give integration engineering and cloud services to lab developers.

**Role:** Integrating Cloud Services(IaaS) for Virtual Labs such as Virtual Machines(KVM and OpenVZ containers), Data storage with version controlling; Integrating and maintaining Engineering Services (SaaS) such as Centralized Authentication(LDAP), Project Management Portal(Redmine), Version Control Services(Bazaar, SVN and GIT), Web Analytics(Piwik); Maintaining and giving community support for Virtual Labs developers and end users such as wiki pages(Mediawiki), IRC, mailing lists and Forums/phpBB); Implementing CMS(Drupal) tools for different purposes; Packaging the labs(.deb binary packages); Implementing the LiveCD distribution model by Integrating Virtual-labs into it.

**Contributions:**

- Maintaining LDAP accounts/groups(projects) and integrating the LDAP authentication in all the services that the VLEAD provides.
- Integrating all the VLEAD services for Lab Developers into a portal using “Redmine” Project Management Portal.
- Creating and administering the Virtual Machines/Containers for Virtual Labs and for other VLEAD purposes.
- Did some automation works with Python and Shell Script for VLEAD purposes.
- Dealt with Network administration such as DNS entries for public and private, Virtual Hosts configuration and proxy pass using Apache web server, port forwarding etc.
- Integrated Virtual Labs into a LiveCD which works both client and server for Virtual-labs (hosted by <http://virtual-labs.ac.in>)
- Installed the web analytics tool “Piwik”, integrated the LDAP authentication and maintained the same for the virtual-labs web pages and generated the reports.
- Installed the wiki documentation tool “mediawiki” and integrated with LDAP.
- Installed the forums tool “phpBB” and integrated the LDAP authentication for the same.
- Worked with Drupal and Joomla for Virtual Labs engineering purposes.
- Training the lab developers and staff of Virtual Labs from different IITs, NITs and other institutes, on using version control system(Bazaar) for their labs development.
- Integrating the labs developed by Lab Developers from different IITs, NITs, IIITs and other institutes into the process model defined by our team (VLEAD).

**Technologies Used:** OpenLDAP, Redmine, SSH, Apache, Bazaar, SVN, Mediawiki, phpBB, Drupal, Piwik, PHP, Python, Shell Scripting, Wireshark, Debian GNU Tools.

**Innominds Software Pvt. Ltd.**  
Hyderabad, Andhra Pradesh

*Trainee Software Engineer*  
*2010 December to 2011 June*

**Description:** Innominds Software is a leading Outsourced Software Product Engineering Services company which provides the engineering services for the Mobile and Telecom Technology, Enterprise Software and Testing the products.

**Role:** Resolving the issues of the Webkit based BREW mobile platform web browser and the Opensource Webkit under GTK+ and submitted the patches to Webkit Opensource.

**Contributions:**

- Resolved some issues and bugs in the webkit based BMP Browser developed by Innominds which used C and C++ programming language.
- Resolved some open issues on rendering of the Webkit engine under GTK+ and Qt.

**Technologies used:** C, C++, BREW Mobile Platform, GIT Version Control

<b>Education</b>	<b>C.V.S.R. College Of Engineering, Hyderabad</b> (Affi. to JNTU-H) B.Tech in Computer Science & Engineering	2006 - 2010
	<b>Narayana Junior College (for Boys), Narayanaguda, Hyderabad</b> Board Of Intermediate Education (II year)	2005 - 2006
	<b>Gnanadeep Junior College, Kamareddy</b> Board Of Intermediate Education (I year)	2004 - 2005
	<b>Nagarjuna High School, Kamareddy</b> Secondary School Certificate	2003 - 2004
<b>Academic Projects</b>	<b>Pagination Application</b> Swecha (a non-profit organisation), Andhra Pradesh	<i>Main Project 3 Months</i>
	<p><b>Description:</b> This project is to provide an application for the DTP operators for the pagination process. This is a Free &amp; Open source Software which is built by using the GTK+ Libraries.</p> <p><b>Role:</b> My module in this project is, File Format. i.e, how the data of the documents of the application can be stored/retrieved from/to that application.</p> <p><b>Technologies Used:</b> XML parsers with Python.</p>	
	<b>Building GNU/Linux Operating System From Scratch</b> Swecha (a non-profit organisation), Andhra Pradesh	<i>Mini Project 1 Month</i>
	<p><b>Description:</b> This project is subjected to give a basic idea of how to build our own operating system and how to customize it according to our needs. In this project, I had also provided that how to make a live environment of an operating system.</p> <p><b>Role:</b> Everything, as the team size is 1.</p> <p><b>Technologies Used:</b> Basic Unix commands and integration of Linux kernel.</p>	
<b>Technical Skills</b>	<b>Debian GNU/Linux and derivatives</b> Knowledge in administering the GNU/Linux operating systems (Debian and its derivatives), basic knowledge on installing and maintaining OpenLDAP, Apache, Mysql. Scheduling tasks using "cron". Custom built Debian based distributions for installing at client and office locations. Can create binary Debian Packages(.deb).	
	<b>Virtualization</b> Implementing "KVM" and Container based virtualization ("OpenVZ") fully and para virtualization methods using both the web interfaced ("Proxmox") and CLI. Backup and migrate virtual servers in live and offline image based replications. Can troubleshoot containers and fully virtualized images by mounting and using "chroot" based techniques.	
	<b>Networking</b> Knowledge on wireless network configuration, different networking protocols, packet routing configuration, firewall settings, proxy server configuration. Can resolve the network and web related issues using "Wireshark".	
	<b>Web Technologies/Web Applications</b> Intermediate knowledge in HMTL, CSS, JavaScript and PHP. Knowledge on using the Content Management Systems like Drupal, web applications like Django and Ruby on Rails (RoR).	

Maintained Project Management Portal (Redmine). Maintained CGI based administration panels(Easypush from deepOfix) for the OpenLDAP. Proficient knowledge on installing and maintaining the web analytics(“Piwik”), forums(“phpBB”) and wiki(“mediawiki”).

### **Programming/Scripting Languages**

Work experience in C programming language, knowledge on C++and Java(Core) and the basic knowledge on Python, Perl, Ruby and Shell Scripting. Ability to debug (using GDB), understand and analyse the code comfortably.

### **Database Technologies**

Comfort in using the “Mysql” in textual and graphical mode. Administering the “Mysql Server” and usage of “SQL” language. Basic idea on Object Oriented DBMS like “PostgreSQL” and Document based DBMS like “CouchDB”.

### **Editors/Tools**

Experience in using the IDEs for programming like “Eclipse” for Java, “Anjuta” and “Visual Studio” for C/C++. “BlueFish” for web programming. “Emacs” for standard text editing, “Org-mode” for personal organizing, project/task management, publishing reports, documentation etc. L<sup>A</sup>T<sub>E</sub>X for documentation. “dot(Graphviz)” for diagramatic representation and “Umbrella” for project design diagrams. “GIMP” and “Inkscape” for image manipulation. The general stack of interests and desktop usage include “Debian or Ubuntu GNU/Linux, LXDE/Gnome Desktop Environment, Emacs, Terminator(terminal program), Firefox Web Browser” in all. Version control using “svn” and “git”.

## **Activities**

### **Swecha**

2007-2010

An active volunteer for Swecha(<http://swecha.org>), an N.G.O working on Localization of GNU/Linux and advocacy of Free Software in academia. Participated in many advocacy events and technical camps spreading philosophical and technical awareness on FOSS. Volunteered and participated in 1st state conference of Swecha held in 2010 and Attended for national conferences on Free Software held in 2007 at Hyderabad and 2010 at Bangalore.

### **Drupal Hyderabad**

2009-2010

Volunteer at “Drupal Hyderabad” a Drupal based community based in Hyderabad working for promoting and educating Drupal based portals across companies and academia.

## **Personal Details**

**Father’s Name :** Vadla Vishwanatham

**Gender :** Male

**Date Of Birth :** 23<sup>rd</sup>April, 1989

**Languages known :** English, Telugu, Hindi

### **Email IDs/Public Profile URLs :**

*[mahesh4gnu@gmail.com](mailto:mahesh4gnu@gmail.com)*

*[mahesh@virtual-labs.ac.in](mailto:mahesh@virtual-labs.ac.in)*

Linkedin Profile: *<http://in.linkedin.com/in/maheshkumarvadla>*

Diaspora Profile: *<https://joindiaspora.com/u/maheshkumar>*

Github URL: *<https://github.com/maheshongithub>*

## **Credits**

This resume is prepared in L<sup>A</sup>T<sub>E</sub>X using res.yy.sty and typed in Emacs text editor

## **Declaration**

I hereby declare that the above-mentioned information is correct to my knowledge and I bear the responsibility for the correctness of the above-mentioned particulars.

**Place:**

**Date:**

**(Mahesh Kumar)**