

# Saurabh Barjatiya – Resume

## EDUCATION

Education	University / School	Year	Percentage / CPI
MS CSE	IIIT Hyderabad	2015	8.0
B. Tech(ICT)	DA-IICT	2008	77.6%
AISSCE	D.A.V. Public School	2004	70.2%
AISSE	Agarwal Public School	2002	84.8%

## WORK EXPERIENCE

- I have started a new company called 'Rekall Software Pvt. Ltd.' which specializes in campus IT infrastructure management, esp. for educational institutes. The services include complete management of network, servers, security devices, etc. for a site. All servers are hosted using robust open-source tools and technologies based on Linux platform. The company also specializes in managing infrastructure hosted on cloud.
- I had joined ClipCard Technologies Pvt. Ltd. (A OneOcean company) at its IDC in Hyderabad as SDE in July, 2013. My responsibilities at ClipCard included managing IT infrastructure located at ClipCard India office and online infrastructure hosted on AWS cloud. I also provided DevOp support for developers at both sites (Hyderabad and Seattle).
- I have worked at VLEAD (Virtual Labs Engineering and Architecture Division), Virtual labs project, IIIT Hyderabad as Technical Architect during October, 2012 to July, 2013. As a engineer at project I was responsible for designing and implementing a cloud infrastructure for hosting all virtual labs from central location. The project at the minimum required support for 300+ VMs for development of various labs.

Hence as part of the project I was responsible for setting up something close to a private cloud. This included implementation of storage networks and virtualization stack which used both VMs (kvm) and containers (openVZ).

- I had joined IIIT Hyderabad, India as lecturer in July, 2009. I served as lecturer till October, 2012. As lecturer I taught courses like IT Workshop I, Software Technologies, Scripting and Computer Environment and offered labs for courses like System and Resource Virtualization and Advanced Computer Networks.
- I help in IT infrastructure management at IIIT Hyderabad. I coordinate configuration and maintenance of servers, network and security devices. I have managed high-end security devices, network devices (switches, routers, etc.) and servers.

I have designed the current IP addressing scheme of IIIT Hyderabad. I have configured and provided support for virtualization, storage networks, VPN, Wake On LAN, centralized DHCP, DNS, apache virtual hosting, etc. I take part in many important meetings related to staff recruitment and decision making related to IT infrastructure.

## PUBLICATIONS

**Nov 2012 - Paper, Patent:** BlueShield: A Layer 2 Appliance for Enhanced Isolation and Security Hardening among Multi-tenant Cloud Workloads ([IEEE Link](#), [Personal copy](#))

## PROJECTS

- **Erlang Cloud** (Erlang) - As part of my Phd research I am building a private cloud stack using Erlang. The goal is to make installation of the cloud being built straight forward and to not break ability to use underlying virtualization layer directly.

Further the cloud being built is going to be fully redundant for High-Availability (HA) and would support hot upgradation of code. The cloud will support containers (openVZ, lxc) which are not supported by any mainstream cloud software. The project is targetted towards organizations which would have complete control over all VMs or containers under single administrative domain such as educational institutes.

- **On-line Erlang interpreter** (Erlang) - An advanced on-line Erlang interpreter which is capable of remembering bindings and handling anonymous functions, recursion and error handling. The interpreter is hosted at <http://www.erlangcentral.com/>
- **Operating System** (C, x86 Assembly) - A very basic operating system was made. After starting from small start up code we learned how to boot using Bochs and added keyboard support for Shift and Caps lock keys. We added hard disk support and learned how to install our OS on hard disk and live CD. The final OS supported many virtual terminals running different processes using cooperative scheduling. The project was done in team of two and I worked on booting from live CD and hard disk support.
- **Two player on-line chess** (ASP.NET, VB.NET) - Two player on-line chess was made on which many chess games could run simultaneously. This was designed for chess club of University so that chess competitions could be organized on-line in labs. It had all the features required by chess club to organize chess competition including team management, user management, result page, admin interface and timers. It was used by chess club for organizing various competitions very easily and efficiently.
- **Wake On LAN** (C, PHP) - Wake On LAN is a website based service which allows users to power on their machine using Wake feature supported by modern LAN cards. This leads to considerable power saving as machines which are going to be used remotely, need not be left powered on 24x7. Users can power on machines when required from any location and power it off when work is over.

## WORK ASPIRATION

- Cloud and virtualization
- Parallel and distributed application development
- Linux Server and network administration
- Intranet and Internet security

## CONTACT INFORMATION

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