Piyush Kumar *Red Hat Certified Engineer*

16-March-1996

BE-CSE   Birla Institute Of Technology , Mesra

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Objective

To continuously enhance my knowledge skills and experience by getting involved in challenging work environment & utilize them for personal and organizational growth to the best of my ability.

Educational Qualifications

Qualification	School / Institute (Board / University)	Year	CGPA / %
BE-CSE	Birla Institute Of Technology, Mesra, Ranchi.	2018	8.38
XII	Kendriya Vidyalaya Suratgarh Cantt, (Raj.) CBSE	2013	88.60
X	Kendriya Vidyalaya Suratgarh Cantt, (Raj.) CBSE	2011	10.00

Skills

- **Programming Languages :-** C, C++, Java, Python, Go.
- **Blockchain Platforms :-** Hyperledger, Ethereum, Bitcoin.
- **DevOps Tool :-** Docker, Kubernetes, Ansible, Puppet, Git, SVN, AWS.
- **RDBMS :-** MySQL, MariaDB, Oracle 11g.
- **Web Designing Languages :-** HTML & CSS.
- **Operating Systems :-** Red Hat, Ubuntu & other Linux Versions, Windows.
- **Servers & Protocols :-** SSH, TELNET, DNS, HTTP, DHCP, FTP, SAMBA, NFS, NTP, LVM, APACHE, RIP, OSPF, SSHFS, ISCSI, TARGETCLI, GLUSTERFS etc.
- **Others :-** Hypervisors, Routing, Shell Scripting.
- **Interests :-** Blockchain, Cloud Computing, DevOps, Linux Development, Virtualization, Data Structures and Algorithms, Competitive Coding like on Codechef, Hackerrank etc., Open Source Technologies.

Experience / Internships

- **Associate Innovation Engineer (Zenlabs R&D, Zensar Technologies, Pune) :-**
  o Building Blockchain Orchestration Tool to spawn dynamic blockchain network & deploy smart contracts on it with single host configuration as well as multihost.
  o Responsible for designing blockchain network architecture & writing the smart contracts for decentralize applications.
  o Integrating the front end with blockchain network.
  o Exploring new blockchain platforms, doing R&D and making POCs on blockchain.

    Reference: Sudeep Choudhari (9820507227)   Jul 2018 – Present.

- **Blockchain Developer Intern   (Zenlabs R&D, Zensar Technologies, Pune) :-**
  o Build POCs like **RMA tracking**, **International Health Agency** (Global Organ Transplant Registry) etc.
  o Created scalable & customize blockchain network on single host as well multi host.
  o Explored and build **Decentralized Applications** for different use cases.
  o Wrote in house **smart contracts** in Go as well as Nodejs, build blockchain infrastructure for different Dapps and done R&D.

    Jan 2018 – Jun 2018.

- **Summer Intern :-** Automate Deployment of **Cloud Computing** & **Virtualization** with **Containerized Docker** Integration On Redhat Linux System Using **Python CGI** and Provisioned by **DevOps** - Own Cloud Infrastructure with Operational Intelligence Tool **Splunk** Under Vimal Daga Sir in **LINUXWORLD Pvt. Ltd. RedHat Certified and Authorised Partner**.
  Reference: Ashutoshh Singh (9820507227)   *May 2016 – Jun 2016.*

- **Oracle Certified Professional & Oracle Certified Associate (OCP & OCA) Training :-**
  Learn and practice all the Professional and Industry level routine work of DBA on Oracle 11g like to put the Database on archive mode, taking different types of backups like **hot, cold, RMAN** etc. and Recovery of Database in different situation so to **maintain the high Hit Ratios** and Various other stuffs at **Road Ahead Technologies Pvt. Ltd., Pearson Authorised Partner**.
  Reference: Abhishek Jain (9820507227)   *Aug 2015 – Mar 2016.*

Certifications / Badges / Achievements

- **IBM Verified Badges :-** Blockchain Essentials, Blockchain Foundation Developer,
  Docker Essentials. (getting > 90%).   Aug 2018
- **Coursera :-** Blockchain basics   Cert. ID: **XBA58DL46KTD.**   Aug 2018
- **AMCAT :-** ID: **30006399678139**   Achieving good National percentile
  Computer Science:-92.7% Quantitative:- 96.9%   July 2017
- **EX300 Red Hat Certified Engineer :-** RHEL v7   Cert. ID: **160-275-855.**   Dec 2016
- **EX200 Red Hat Certified System Administrator :-** RHEL v7 Cert. ID: **160-275-855.**   Dec 2016
- **1Z0051 Oracle Database 11g SQL Fundamentals I :-** Oracle 11g Cert. ID: **OC1628469.**   Aug 2016
- **Academics in College :-** Ranked among Top 10 students among all branches.   May 2018
- **Academics in School :-** Xth School Topper & Receive Certificate of Merit & cash price of Rs 10000 from KVS and various Certificates from Army Welfare Society. Participation Certifications in National Junior Maths and Science Olympiads.   Apr 2011

Projects

Title:-   Estimation of Urbanization Of An Area Using Image Segmentation Techniques

Description :- The purpose is to **substitute the time consuming** and **exhausting manual work** used for the estimation of urbanization, using only visual photographic satellite images and marginal manual work with the methods which **automatically classify** the image blocks of **aerial or satellite images** into **Built-Up Areas** like buildings, roads etc. and **Non Built-Up Areas** like forests, rivers etc. At last **Graphical representation** of Urbanization of an area in terms of ratio of buildings, vegetation and roads.

The application includes pre-processing of Aerial Image and followed by various image segmentation techniques. After pre-processing vegetation extraction using **Normalized Difference Vegetation Index (NDVI).** Then building extraction is done using **edge** and **corner detection**. Then classify the different parts of image into Built-Up & Non Built-Up Area. Then clustering is done for **image enhancement** using **K mean Clustering.** At last we will represent the estimation of vegetation and building in pie chart.

Jan 2018 - Apr 2018

Title :-   Deployed my Own Cloud " BlackHole Cloud "

Description :- Cloud Computing Services Access through web portal All users login verification through database & users details & no. of OS running is stored in database.

- **SaaS :-** Opera, Google Chrome, Terminal, Adobe, Firefox, Notepad, Gedit etc.

- **Staas :-** Object Storage through **NFS**, **SAMBA**, **SSHFS**, **GLUSTERFS** & Block Storage **ISCSI**.
- **Iaas :-** Providing OS of required RAM, CPU, and Storage on demand of Clients. OS like RedHat, Kali, Ubuntu, Windows etc. are provided in Web Browser using **VNC** protocol even using **RFID** tags by which we can shift our running OS in any devices having **NFC** support and Web Browsers.
- **Paas :-** Providing platform like python, java, Ansible, Apache server etc. using **Docker & Container**.

Technology Used :-
- **OS :-** RedHat, Kali, Ubuntu, Windows, OpenSuse, CentOS.
- **Back End :-** Python with Python **CGI** linked with **MariaDB** database.
- **Front End :-** HTML, CSS, JS, BOOTSTRAP.
- **Tools :-** Qemu-Kvm, Sublime, Browser, RFID tags.   Jun 2016 - Aug 2016

Title :-   **StandBy Database (DATAGUARD)**

Description :- It enables very **high-speed movement of data and metadata** from one database to another means providing **Disaster recovery**, **Complete automatic data protection**, and **High availability**. Servers working on Oracle 11g database with base OS Oracle Linux Enterprise. One is currently open and Up On which huge no. of transaction are going on and while other is in mount mode with **Different geographical locations**.

As **automate the backups of archives** & **datafiles from server 1 to server 2**, Whenever if there is problem in currently up server 1 or get destroyed in disaster or burnt out or require maintenance so to avoid failure of ongoing transactions decrease or decrease in hit ratio or to maintain **no time lag** or **server down** problem, then with few commands to run the server 2 will automatically up and working as primary server So **no loss of ongoing transactions and Data Loss**.

Technology Used :-
- **Base OS :-** Oracle Linux Enterprise.
- **Technology :-** Oracle 11g, Oracle Data Pump.
- **Tools :-** Linux, Type-2 Hypervisor, Putty.   Jan 2016 - Mar 2016

Extra Curricular Activities
- **Tech Fest :-** Programming Club Coordinator conducting various coding competitions and seminars and Taking part in coding competitions.
- **Sport Fest :-** Taking part in various sports events like Cricket and Volleyball.

Other Interests
- Eager To know & learn more about Trending Technology and Gathering general knowledge like from Wikis.
- Doing Drawing and Social Work & Playing and Watching Cricket.
- Watching Sci-fi movies & based on Inspiring True Events movies, Hearing music, Techs videos on YouTube.

Strengths

Believe in myself, Quick learner, Hard working With Smartness, Optimistic, Trustworthy person, Adjustable to any working environment, Ability to work as individual as well as in team.