

Piyush Kumar

16-March-1996

Blockchain / RedHat Certified Engineer.

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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	8.39
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, JavaScript.
- **Blockchain:** Hyperledger, Bitcoin, SmartContract.
- **DevOps Tool:** AWS, Azure, Docker, Kubernetes, Ansible, Git, Svn.
- **NoSQL:** MongoDB.
- **RDBMS:** MySQL, MariaDB, Oracle 11g.
- **Operating Systems:** Redhat, Ubuntu & other Linux Versions, Windows.
- **Linux Servers & Protocols:** Ssh, Telnet, Dns, Http, Dhcp, Ftp, Samba, Nfs, Ntp, Lvm, Apache, Rip, Sshfs, Iscsi, TargetCli, Glusterfs etc.
- **Others:** Nodejs, Shell Scripting, Hypervisors.
- **Interests:** Blockchain, Cloud Computing, DevOps, Linux Development, Virtualization, Data Structures and Algorithms, Competitive Coding, Open Source Technologies.

Experience / Internships

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

Jul 2018 – Present.

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

Jan 2018 – Jun 2018.

- **Summer Intern (LinuxWorld Pvt. Ltd., Jaipur)**

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.

May 2016 – Jun 2016.

- **Oracle Certified Professional & Associate Training (Road Ahead Technologies Pvt. Ltd., Jaipur)**

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.

Aug 2015 – Mar 2016.

Certifications / Badges / Achievements

- **MOOC (University Of Nicosia):-** Introduction To Digital Currencies. (88.83%) **Dec 2018**
- **Specialization In Blockchain (University at Buffalo and The State University Of New York):-** **Oct 2018**
 Cert. ID: **RD5V8X26ESR5** Blockchain Basics: 100.00% Smart Contracts: 100.00%
 Blockchain Dapps: 100.00% Blockchain Platform: 98.00%
- **Version Control with GIT (Atkassian):-** Cert. ID: **V8UPSKG95XH8** **Oct 2018**
- **IBM Verified Badges:-** Blockchain Essentials, Blockchain Foundation Developer, Docker Essentials. (> 90%). **Aug 2018**
- **AMCAT:-** ID: **30006399678139** Computer Science: 92.7% Quantitative: 96.9% **July 2017**
- **EX300 RHCE & EX200 RHCSA:-** 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 Rs10000 from KVS and various Certificates from Army Welfare Society. Participation Certifications in National Junior Maths and Science Olympiads. **Apr 2011**

Projects

Title:- Dynamic Blockchain Network

Description:- This helps developers to focus more on the development of decentralise applications rather than wasting time in creating BN. Dynamic blockchain network of Hyperledger Fabric can be spawned on local infrastructure as well as on clouds like AWS, Azure etc by just providing basic details. BN can be spawn on single host or multi host. Once BN is created then it could be expanded in terms of peers, organisations, channels, chaincodes. BN created with kafka based consensus which helps to reach the consensus very fast and byzantine fault tolerant. Everything is dynamic like adding peers, organisations, creating channels, installing & instantiating chaincodes, joining channels etc.

Technology Used:-

Hyperledger Fabric, Kafka, Kubernetes, Docker, NFS, Shell Scripting.

Jun 2018 - Aug 2018

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.

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 graphical representation of Urbanization of an area in terms of ratio of buildings, vegetation and roads.

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.
- **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 or decrease in hit ratio or to minimise 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.

Jan 2016 - Mar 2016

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, 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.