

Abhishek khanchi

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Summary of Experience& Skills

Professional Experience:

1. HCL Technologies – May 16,2019 - till now
- 2.Tavant Technologies India Pvt. Ltd – April 13,2016 – April 23,2019
- 3.Capgemini Dec 17,2015- April 7,2016
- 4.Huawei Technologies – April 26, 2013 - Dec 15,2015
5. MTS – Sep 28, 2011 – March 31 ,2013
6. Freelancing – March 5, 2011 – Sep 25, 2011

B. Tech. from SKIET, Kurukshetra 2010.

7 years of software development experience.

I am person with flow based programming expertise with machine learning ,AI and distributed computing skills

In my work experience solved problems in various domain as mention below:

- Machine learning
- Data Ware housing
- Social data mining
- Networking
- open source customization
- Telecoms data analysis
- Media data analysis (Radio, TV)
- News and Media content scraping from web.
- System Integration

Developed Test Analytics system , for one of the telecommunication client here I was capturing input data from various sources like **Airflow,Asterisk server,sip phones,silk central,test regression output files,operational data from operation db** and creating a data mart in Big query then finding most frequent reason failure. Test regression coverage

Algorithm developed, and solution written for **Recommender system**, for one of the product developed for media domain.

Developed Reporting system for Data analysis platform. Keeping in focus future **advanced analytics requirement having use of machine learning and mathematical formulations**

Developed data analysis Platform for my current project using **micro service architecture**. In which I developed Data Integration solution developed single handedly used **Apache Airflow used layer architecture**. In DI I am downloading data from **Amazon redshift to AWS s3 bucket**. From there I migrated data load files to **GCS (Google cloud storage)** from there I loaded files into LNRR dataset tables using load truncate approach then data extracted from LN table filed during the process. Inserted into OD dataset into various tables as required with rules taking care of avoiding duplicate. Then various tables in downstream datasets were refreshed using sql operations with new data available in OD [IN, TG, VW] Developed most metrics for front end. Got spot award for the same. Here in this project we have given various metrics radio domain. Currently managing the project

Big Data Assignment done in which:

1. I setup apache Hadoop environment in my system including **Apache Hadoop 2.7.3 Hdfs, hive server 2 , Apache NIFI ,MySQL, Elk stack(Elastic search ,Kibana, Logstash)**
2. I build a data flow in Apache NIFI that ingest data from **Facebook into Hadoop**
3. Same data should be inserted in **Elastic Search**
4. Then created a Kibana dashboard on the top of that data
5. Created a sample database a MySQL database.
6. Used Sqoop to import those tables into Hadoop as **hive tables**
7. made hive tables accessible using oracle **sql developer client**

System written using **Anomaly detection** to check whether the incoming claim is Fraudulent or not. In this project I was calculating the score by analyzing warranty claim request received from web-service client w.r.t the historical data and mathematical formulation. This score helps the user to examine whether the **claim is fraudulent or not**.

I have created a framework for unstructured data extraction from **Facebook, YouTube, Twitter, IDMB and news media websites cleaning it**. To get some attributes for sentimental analysis for getting to know people interest.

I have worked on **PyF framework** based ETL and BI solution. Here I have created some transformation for data processing. The task was to take some xml files from pool and process the data using business logics and save them in report db and write some logic required data extraction in Excel.

Automated parallel execution of regression testing using python

Scd:

- i) In this my framework was reading code version string from jeera xls file then check code revision info from xls maintained for scd purpose for code revision info then download the code from svn for scd.Using the revision no
 - ii). Then clean the code base on the. Basis of platform information given in jira xls
 - iii) Sent the code base to various platforms on the basis input sheet that contains mapping of IP versus platform
 - iv)There build the code on the basis of components and platform.
 - v)Then generate the obj dump for the current lib generated and previous delivered one .compare the obj dump using beyond compare
 - vi) Ip are required to send the codebase to correct platform automatically
- If obj dump are matching, then fine it will create a single script
- Then documentation will have generated automatically

Command-line tool prepared for system log analysis for protocol testing.

Worked in **IOT** project where tested the UIP stack integrated with light os. Using **python scapy framework**.

Peach fuzz testing done for some protocol like MRCP as per security guidelines

TAD Written for various protocols after extracting knowledge threads from RFCs of various **protocols**.

CI Stabilization run with achievement of Goal zero test failure in IOT Project

Test result report generation by aggregating all the xml file generated as a result of testing.

Report automation task end to end handled for whole south east Asia region of Huawei GNOC using **UNIBI** (Unified Business Intelligence Tool) **KETTLE ETL, OLAP, CUBE ,static report designer, Python, oracle 11 g** was db for backend .

SMS Web service POC developed and its integration with the ticketing system (**SDM: --Service desk management**)

Played important role in system integration team setup. This is team of around 25 people.

HRMS portal requirement gathering to development (**Using PHP, JavaScript, MySQL** for this I used a open source **ICEHRM** as a base platform where I implemented user requirements from more than 18 project managers I took requirements and streamlined them and finally given a working product to them

Moving the Archive log from Oracle 11 g into Hadoop using RMAN backup.

Report Automation requirement handled in MTS MSC Haryana using **Pentaho kettle Etl** and python by collecting data from various sources[servers] in live network and cleaning them and generated reports

MOS5100 bugs fixing and new feature implementation in SI module

Network Management efficiency improvement by doing Alarm correlation here we have done **Alarm correlation in mos5100 system to avoid alarm storm**, so that user will be able to see useful alarm on the screen this done by defining rules in Netcool system using its scripting language.

Telecom data mining also performed while report automation projects in requirements analysis phase.

Task management system developed for task allocation similar to Jira system of opensource using python and Django.

Network administration also handled for whole Haryana and some regions of Delhi while working in MTS.

Good exposure of working with International clients and cross cultural team.

7 years of experience in software industry, IT Consultant, Project Leading, Client Relationship, Development of Software Project, Business Analysis, SDLC Implementation, across domain & technology expertise with strong system integration skills. A broad knowledge of the entire technology stack, application, data, application infrastructure, and business architecture.

In current profile: **Technical Lead**, I am required to perform **multi-faceted roles. From System Architect to, Technology planning, innovator to solving issues faced by client, Driving mathematical formulation and solution for machine learning problems.**

Current area of interest **Artificial Intelligence, Machine Learning, Big Data and Analytics, Natural Language Processing (NLP), Block chain, FBP.**

Have worked with below mention tools in major:

Data visualization: Python, Pentaho BI (Static Report designer, olap report designer)

Data Integration: Python, Apache Airflow, Pentaho (Kettle ETL)

Data Analysis: Knowledge to analyze large data set for Searching and Discovering useful patterns of data

Machinelearning: supervised, unsupervised ,k-means, k-mediod, hierarchical clustering algorithms like cure, agglomerative clustering, Dbscan, classification,

decision tree, prediction, naive bayes classification, a priori, fp tree algorithm, bayesian network/ belief network, dimensionality reduction pca. GA. Optimization.

Mathematical programming: Python

Web Application Development: HTML4 & 5/CSS, JavaScript, Django, Flask

Web Server: Apache2(httpd), IIS

Cloud Platform: Aws (S3, Redshift) ,Google(GCS ,GCE ,Google Big query)

RDBMS: Oracle 11g,12c, MySQL, SQLite, Sybase, Postgre sql, aws redshift

Message broker: RabbitMq

Columnar DB : Google Big query

NO Sql : MongoDB

Graph db: Neo 4j

Virtualization: VBOX, Docker

Languages:

Proficient in: Python, JavaScript, PLsql

Familiar with: Core Java, C#, Haskell, C++, C, PHP, Ruby, Julia

Scripting: Batch, Shell scripting

Operating Systems : Microsoft Windows (v. XP, 7, 8),Linux((Ubuntu, Fedora, Pear OS, Mint, open sues 11.2,AIX,HP-unix,CentOS7),Open BSD, Solaris

Networking:

CCNA,

CCNP (Routing & Switching)

Good understanding of OSI Model, TCP/IP protocol suite (IP, ARP, TCP, UDP, SNMP, IGMP, FTP, TFTP, NTP).

Bridging and switching concepts,

Working knowledge with IP ROUTING

Protocols like OSPF, EIGRP, BGP

MPLS CONCEPT'S AND TERMINOLOGY.

LAN technologies such as Ethernet-CSMA/CD.

STP - IEEE 802.1d/ IEEE 802.1w.

VLANs, Tagging - IEEE 802.1q.

IP addressing and sub netting, VLSM, NATTING & PATTING, ACL.

MPLS (LDP, TDP)

Expertise Protocols: BGP, OSPF, EIGRP, RIP, DEFAULT & STATIC routes.

Switching:

Configuring and Troubleshooting of Data VLAN, Inter-VLAN routing, VTP, STP, PVST+, and other configuration

Redundancy:

Knowledge of configuring protocols like HSRP, VRRP& GLBP for creating redundant network.

Professional Experience

HCL Technologies (Senior Technical Lead)

May,2019 – Till now

Main Roles and Responsibilities

Work across Test Data Analysis solution for voice over Ip platforms.

Algorithm developed, and solution written for **Test Data Analytics**, for one of the telecommunication client here I was capturing input data from various sources like Asterisk server,sip phones,silk central,test regression output files,operational data from operation db and creating a data mart in Big query then finding most frequent reason failure. Test regression coverage

Architect data integration solutions across cloud platforms like GCS(google cloud storage), GCE (Google compute engine), Google big query , Airflow, MySQL,Sip Phones,silk central ,Robot output files,Asterisk server

Tavant Technologies (Technical Lead)

April 13,2016 – April 23,2019

Main Roles and Responsibilities

Work across Data integration solutions, machine learning problem like Anomaly detection and Recommender system

Algorithm developed, and solution written for **Recommender system**, for one of the product developed for media domain. Solution found By Deriving mathematical eqn. and data selection techniques. We used microservice we developed webservice using python, flask Google Big query. In this we were processing some information giving recommendation plan to end customer on basis input requirement.

Architect data integration solutions across cloud platforms like Aws redshift, Aws s3 bucket GCS (google cloud storage), GCE (Google compute engine), Google big query , Airflow, MySQL, various scripts written for system health checker for production platform , Production env to dev env data refresh, Production site monitoring script if not available then sends failure notification concerned team. Implemented whole solution single handedly, from scratch.

In this project we were calculating the score by analyzing claim request received from Web service client w.r.t the historical data and mathematical formulation. This score help the user to examine whether the claim is Fraudulent or not.

Responsibilities: -

- 1.Taken part in mathematical sol derivation for the problem

2. Web service was written in **Python** with **Flask** (Python web Framework) combination for Handling request from TWMS system
3. Webservice integration with Apache2 (httpd) using bridge wsgi
4. Platform change from Ubuntu 14.4 to CentOS7
5. Developed Docker Image for Build and Packaging of our dev. Environment for QA and Production

Big Data Assignment done in which:

1. I setup **Apache Hadoop** environment in my system including **Apache Hadoop 2.7.3 Hdfs, hive server 2, Apache NIFI, MySQL, Elk stack(Elastic search, Kibana, Logstash)**
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I have created a framework for unstructured data extraction from **Facebook, YouTube, Twitter, IDMB and news media** websites cleaning it. To get some attribute. For sentimental analysis for getting to know people interest. Using python

Developed Reporting system for Data analysis platform. Here we developed Reporting system to generate the report in multiple format like excel/csv/pdf. We developed this system As a service which invoked it by sending **post** request with params for creating the report. params like sequenced sqls as desired for O/p file format. Based on sqls and desired business logics reports were generated send back as response in streaming object. Keeping in focus future **advanced analytics requirement having use of machine learning and mathematical formulations**

1. Web service was written in **Python** with **Flask** (Python web Framework) combination for Handling request from DIAL REPORT
2. Webservice integration with Apache2 (httpd) using bridge wsgi

Awards and Recognitions:

Received **Spot light Award for Data integration platform** development from scratch Below is the snapshot of few word of appreciation mail from our SDVA:→

Abhishek,

Just wanted to say thanks for the robust backend data integration system you have built from scratch! Yes we had a bit of delay since we kicked off the development on Airflow, but since the system went live it has been running almost **flawless**.

We really appreciate your efforts in taking **complete ownership** for the DI platform, and periodically enhancing the system by adding new functionalities.

Please keep up the good work! We are expecting more innovative ideas from you in future which can take the DI platform to next level 😊

Capgemini (Consultant)

Dec 17,2015- April 7,2016

Main Roles and Responsibilities

Work across Data integration solutions and reporting requirements.

I have worked on **PyF framework** based ETL and BI solution. Here I have created some transformation for data processing. The task was to take some xml files from pool and process the data using business logics and save them in report db and write some logic required data extraction in Excel.

Huawei Technologies (Software Engineer)

April 2014 - Dec 15,2015

Main Roles and Responsibilities

[Automation framework development and testing]

Architect the Automated parallel execution of regression testing using python. Here test regression framework was downloaded on multiple vms .and were parallelylly executed. Here we were giving release every three month during the release time a lot legacy protocols were required to be tested. This testing was a huge activity I took part in automating the requirements. developed the framework for the same. Then this time period of regression testing came come down from weeks to days based vm availability.

Scd: This framework need to work across platform as required because this codebase was Used by various pdts there product were running on various platforms like solaris,hpunix,redhat,aix,windows server etc .This was a manual work it was taking around sometimes a week time period to deliver the things. After this framework came in existence the work time reduced to some hr(4hr) in some cases few minutes.

i) In this my framework was reading code version string from jeera xls file then check code revision info from xls maintained for scd purpose for code revision info then download the code from svn for scd. Using the revision no

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Command-line tool prepared for system log analysis for protocol testing. Using python
Worked in **IOT** project where tested the UIP stack integrated with light os. Using **python scapy framework** like ND6

Peach fuzz testing done for some protocol like MRCP as per security guidelines

TAD Written for various protocols after extracting knowledge threads from RFCs of various protocols.

CI Stabilization run with achievement of Goal zero test failure in IOT Project

Test result report generation by aggregating all the xml file generated as a result of testing.

System Integrator for GNOC (Huawei Global Network Operations Centre)

April 2013 - March 2014

Main Responsibilities

Report automation task end to end handled for whole south east Asia region of Huawei GNOC using UNIBI (Unified Business Intelligence Tool) KETTLE ETL, OLAP , CUBE ,static report designer, Python, oracle 11 g was db for backend

Aircel Report automation (Pentaho project)

Airtel Report automation (Pentaho project)

TATA report automation (Pentaho project)

Zen report automation (Pentaho project)

MTN report automation (Pentaho project)

SMS Web service POC developed and its integration with the ticketing system (SDM :--Service desk management)

BI Report analysis and report standardization.

Played important role in system integration team setup. This is team of around 25 people.

HRMS portal requirement gathering to development (Using **PHP, JavaScript, MySQL** for this I used a open source **ICEHRM** as a base platform where I implemented user requirements from more than 18 project managers I took requirements and streamlined them and finally given a working product to them

Moving the Archive log from Oracle 11 g into Hadoop using RMAN backup.

Awards and Recognitions:

I have redesigned the architecture of a report project at Huawei which was taking earlier 5hrs 30 minutes (1,188,000 seconds) in report data formation. After implementation of architecture designed by me. Now it is taking 3 seconds in all processing and giving final result. After this our world head of SI (SYSTEM INTEGRATOR) department Huawei technologies send mail to everybody whole organization should learn from

him how to do architecture designing for optimization that's a piece of respect with which I was honored at that time. (Performance improvement in project execution time: 1,188,000 seconds → 3 seconds (achieved in production environment of GNOC))
Because Of My Hard work and dedication I was chosen among 100 guys for IOT(Internet of things) uip stack testing

MTS

Sep 28, 2011 – March 31 ,2013

Job Profile/ Role

Working as FMS ENGINEER/System Integrator

Report Automation requirement handled in MTS MSC Haryana using Pentaho kettle Etl and python by collecting data from various sources[servers] in live network and cleaning them and generated reports as required by Business

Network Management efficiency improvement by doing Alarm correlation here we have done Alarm correlation in mos5100 system to avoid alarm storm, so that user will be able to see useful alarm on the screen this done by defining rules in Netcool system using its scripting language.

MOS5100 bugs fixing and new feature implementation in SI module

Task management system developed using python and Django

Network administration also handled for whole Haryana and some regions of Delhi while working in MTS.

Configuring, Maintaining and Troubleshooting Cisco Routers &Switches.

Performing WAN Troubleshooting.

Working as a part of Network Operation Centre and participate in the operational activity.

BGP routing (Route Maps, AS-Path, MED, Local Preference) to load balance traffic.

Implement BGP Route reflector for reflecting routes learned from IBGP peers to other connected IBGP peer

Implement BGP Confederations for better management of Enterprise Network.

Implement OSPF in Multi-Area OSPF environment.

Implemented traffic filters using Standard and Extended access-lists, Distribute-Lists and Route Maps.

Creating redundancy in networks using HSRP, VRRP& GLBP.

Enabling and configuring DHCP services on Cisco routers.

Configuring and Troubleshooting of Data VLAN, Inter-vlan routing, VTP, STP, PVST+

Configuring ether channel using LACP, PAGP Protocols

Looking after cabling issues and troubleshooting.

Implementing, & Troubleshooting the LAN Network.

Configuration of VLAN'S and port security.

Interacting with Client

Coordination with NOC Engineers for making 100% network uptime.

Awards and Recognitions:

1 CCNA CERTIFIED

2. Certified by" NATIONAL MATHEMATICS OLYMPIAD CONTEST A-LEVEL 200"

Freelancing:

March 5, 2011 – Sep 25, 2011

Ignitedebate.com

Developed an HTML 5 website.

Hammondconstructions.com

Developed an HTML 5 website for Hammond Constructions.

Outsmart.net.au/sizzle

Modify an HTML 5 website for 'Outsmart' an internet marketing company.

[Test Organizer](#)

Developed a test organizer which helps in developing tests & organizing them in Python for Mathematics Point.

[Assessing Software Quality using Coupling and Cohesion Metrics](#)

Learned concept of cohesion and coupling and applied to several of projects later on. Analyzed and used various Metric to measure coupling and cohesion. It provides a methodology to judge the quality of any software.