Panchumarthi Venkata Pradeep Kumar

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

+919632445778

panchumarthi.pradeep@gmail.com

| EDUCATION | | | |
|----------------------------|---|--------|------|
| Program | Institution | %/CGPA | Year |
| B Tech in Computer Science | National Institute Of Technology, Calicut | 7.84 | 2014 |
| XII - SSC | Nalanda Junior College, AP | 93.2 | 2009 |
| X – SSC | Nirmala High School, AP | 87.6 | 2007 |

RELATED COURSE WORK

- Web Programming
- Image Processing

- Data Mining
- Logic for Computer Science

SKILLS

- CAD Tools: Matlab
- **Programming Skills**: Java, Hiveql
- Frameworks: Spring Boot, Spring Data Jpa, Spring for Kafka, OSGI
- Middleware:JDBC,GRPC
- Databases: SQL (Oracle, Mysql, PostGresql), NOSQL(Aerospike), Big Query, Athena.
- Tools/Platforms: AWS, GCP(Google Cloud), Spark, Kafka, Docker, Kubernetes, Looker.
- Basic Knowledge: MIT Scheme, NASM, Python(numpy,pandas,matplotlib).

PROFESSIONAL EXPERIENCE

Neustar - Bangalore [14-August-2017 to Present]

OneID Self-Service

- Optimized view table api 10 folds by using LRU cache.
- Analyzed and provided insights about gender mismatch and nickname.
- Developed a part of new algorithm for finding transitive relations and clustering among phone, email and address.
- Developed report framework which generates Hive ql based on inputs and api to support hive table automated backups..
- Designed and developed event driven framework to support publisher-subscriber.
- Improved self-service engine multi threading architecture which can accommodate more than 10 processes originating from work flow DAG(directed acyclic graph) designed by users.
- Developed OSGI modular bundles which can dynamically pickup the code based on criteria at runtime.
- Implemented Services like CRM3340, Proactive change Notification and National Change Of Address.
- Converted entire infrastructure to AWS ec2 instance in the view of federated approach.
- Improved match rate by adding rules based on analysis to pre-merge, a clustering technique designed to counter false splits.
- Analyzed data clustering using soundex algorithm and proved that the data lift percentage was very low.
- Developed automated scheduling functionality which will trigger DAG flows.

OneID Bulk Delivery

- Optimized spark jobs for huge data and reduced the shuffling of data.
- Developed proof-of-concept for location detection in polygon using ray algorithm.
- Developed AWS EMR manager based on priority and cost based model.
- Suggested spark level configurations for huge data volume of 2 billion records which improved the performance 10-fold.
- Developed and suggested strategy during the case of data skewness, which drastically improved the performance of spark jobs.
- Used machine learning classifier (random forest) to classify sources based on model prediction of probability.

Common Identity Service

- Lead a team in architecture, design implementations and received the best performer award.
- Optimized services like matching candidate select by bring down the time taken to run huge volume of data.
- Developed lightweight load balancer using round robin connection distribution and support fault tolerance.
- Reduced the cost of AWS ec2 aerospike cluster by 80% after developing a strategy.
- Integrated these services with both real time edge system and above mentioned bulk delivery system.
- Achieved a performance median of 4ms latency and 1500 queries per second throughput per node.
- Completed entire project in given time frame of three months.
- Process of automating entire data load into aerospike using spark and increase the performance of the loader.

IPaaS - Identity Platform As A Service(CDP)

- Worked on large scale distributed systems, designed using micro service architecture with spring boot.
- Developed various services like compute resource and looker service.
- Designed and implemented notification system for downstream consumers with kafka.
- Integrated BI capabilities to the platform for data analysis and visualization using looker.
- Designed data lake and created execution engine DAG to extract, transform using data proc service, spark jobs and load into partitioned bigquery and hive tables.
- Used docker and kubernetes for deployment of various services and leveraged GKE for it.
- Involved brief amount of time on CI/CD pipeline development.
- Designing clean room privacy preserving technology for customers to share data in secured way for insights and segmentation of customers.
- Designing generic MLops related pipeline into the platform for custom models.

Oracle India Private Limited - Bangalore [16-June-2014 to 07-August-2017]

Trace File Analyzer

- Developed command line utility in Java to pull relevant log files to smallest size, yet still gather everything necessary. It also collects data across cluster nodes and consolidates everything in one place.
- Designed local database to store information related to errors like ora-600, ora-7445, user access control.
- Optimized performance of log trimming using Java multi threading.
- Developed a web based user interface using php to analyze the logs collected by above method.
- Run automatic scripts using pattern searching to analyze the log files and generate time line with proactive solution by matching with database meta-data.
- Developed graphical interface to represent OS watcher cpu,io,memory consumption during issue time frame.
- Deployed this application on Oracle Real application cluster and Automatic storage management for high scalability and to handle dynamic work loads.
- Optimized and stabilized the environment by tuning sql's,database and cluster wait events.
- Worked on database space and data layer for some bugs.

Global Non-EDP Training Tracker

Developed tool which will track all the Web-seminar/Webcast, In-class sessions, specifically non-EDP training
which was delivered to Scalability engineers and provide easy one-point access to relevant training materials
for offline reference.

Ayan tech solutions-Chennai [21-May-2013 to 28-June-2013]

- Successfully implemented process chain that refresh the report every day in SAP business intelligence.
- Created a dashboard using web intelligence report generated from Bex query.
- Familiar with some of the data marts like data cube, data store object, multi-provider in SAP business intelligence.
- Familiar with some of the report generating tools like crystal report, web intelligence in SAP business objects.

POSITIONS OF RESPONSIBILITY

- Coordinator of League of Machines in TATHVA 2012.
- Conducted Drupal Training Sessions.

AWARDS

- Received best performer-spot award.
- Winner of google cloud hero competition.
- Participated in ML hackathon and secured 3rd place.

CERTIFICATIONS

- Oracle Database 11g Administrator Certified Associate.
- Oracle Certified Associate, Java SE 7 Programmer.
- Oracle Certified Professional, Java SE 7 Programmer.
- PGP AI, ML Certified UT Austin



