Muhammad Saqib

https://www.linkedin.com/in/mohamedsaqib/

https://github.com/saqibarfeen/

#### **EDUCATION**

National University of Computer and Emerging Sciences

BS Computer Science, CGPA: 3.03/4.0

Ayesha Bawany Govt. College

Inter Pre-Engineering, 76% marks

Experience

Cloud9 Networks FZE UAE

Sr. Software Engineer

July 2016 - Present

2010 - 2012

Email: saqib.arfeen@gmail.com

Mobile: +92 346 6311199

## $\circ$ Cloud Monitoring Software:

- \* Research and solution design for Openstack private cloud infrastucture and services monitoring.
- \* Development of the proposed design that included Sandboxed Lua plugins for Heka(github.com/mozilla/heka) and python plugins for collected for data collection and processing and Elasticsearch , Logstash and Influxdb for Storage and retrieval and Kibana for Visualization.
- \* Building grok and Lpeg patterns for various services of Openstack cloud: for parsing of machine data into fields for fast retrieval and visualization.
- \* Security testing and best practices.
- \* Built deployment puppet modules and manifests for 1-click deployment.

#### • Network Monitoring System:

- \* Competetor research and analysis of trends in the domain.
- \* Implementing POC solutions with openssource tools and demonstrate them to decision makers.
- \* Design , development and intergration of existing opensource tools and in house built add ons for network monitoing: including querying of timeseries data from network devices and the storage , visualizatioona and reporting.
- \* Elasticsearch, Logstash and Kibana for parsing, storage and retreival of syslog from devices ranging from PDUs to core switches.
- \* Supporting deployment engineer and troubleshooting problems in deployment.

#### o PNDA Project:

- \* Deployed PNDA Big data network analytics toolchain on Openstack cloud private.
- \* Troubleshooting of various SaltStack scripts and declarative states in the deployment process.
- \* Providing support to various users of the open source tool with problems specific to deployment on Open stack cloud.

### • Big Data Analytics Engine:

- \* Developing front-end forms and tables using server-side pagination with Angularjs framework 1.0.
- $\ast\,$  Writing REST api methods in Java Spring.
- \* Design and deployment of distributed hadoop backend- along with tools of the big-data ecosystem.
- \* Creating UI forms for establishing jdcp kafka connector for streaming data from Mysql and MsSQL databases;
- \* Aggregation and storage of data in HDFS.
- \* Created a solution for deduplication of records in HDFS byh scheduling Apache Oozie jobs.

## o Govt. of KPK College Students Wifi Login Management System :

- \* Analysis Design and implementation of the solution.
- \* Lead the development team.
- \* UI/UX process improvement and testing.
- \* Tracking code versions, branches and commits with git.

### SKILLS

- Engineer robust systems with minimalist design and clean code.
- Hands-on expertise with cloud native technologies like **Docker** and **Kubernetes** and deployment of containerized apps and experience with Cloud IaaS namely **AWS** and **Google Cloud**.
- Experience with Big data and its tools like developing MapReduce in Java and working with Kafka, Zookeeper, Hive, Impala for reporting in HDFS.
- Expreience with Frontrend technologies: React 16 and Angular 1.0.
- Leading a team of trainee engineers.
- Extensive experience with Python Django, Flask, OOP and Data science tools namely Pandas, Numpy, Keras and Tensorflow.
- HPC distributed cluster system design and programming in MPI, Nvidia Cuda and OpenMP.
- Practical knowledge of HA and load balancers.
- Practical knowledge of hypervisors and SDN with Openvswitch.
- Experience with **Relational, NoSql** and **Time-series databases** such as MySql, MongoDB, Firebase , Influxdb, Graphite, Hive.
- Proficient with Java, Python, JavaScript and C++.

# Hobby Projects

- Sokoban Solver: Solving sokoban puzzle(an NP-Complete problem) with machine learning. Designed a recurrent neural network and generated data by SAT solver. White Paper
- Grpc api: Grpc Nodejs api with Mongodb that out performs its json couterpart by 10-100x speed.
- **Big data clusters**: Built virtual machine cluster for MPI and bare metal cluster system for hadoop mapreduce in HPC lab,FAST.