# Ghouse A Mohammed Principal Solutions Architect

*Ensures client satisfaction by spearheading teams to develop data driven, high performant & distributed AI/ML applications*

## Machine Learning | Distributed Systems | Artificial Intelligence | Big Data | Cloud Architecture

🕾 214.233.5441 🖂 ghousemoh849@gmail.com

* **Technical Leadership:** Worked closely with customers to understand business problems/pain points and translate requirements into AI/ML use cases. Conducted end to end analysis from Infrastructure design, Data sourcing, Data transformation, Analytics, Model Building and Deployment.
* **Designed ML Pipelines:** Design and Developed Machine Learning pipelines which reduced model training and deployment time by over 50%. Optimized models which increased prediction accuracy by 30%.
* **Developed Distributed Applications:** Architected and Developed a distributed application to source 3M PDF pages and achieve text extraction rate of 300K pages/hour up from 10k pages/hour.

|  |  |  |
| --- | --- | --- |
| ML Pipeline Design & Development Data Modeling & Visualization  Distributed Cloud Computing | AI & Data Science Best Practices  Big Data Architecture  Systems Development Life Cycle | Employee Leadership & Supervision  Stakeholder Relationship Management  Cross-Functional Team Collaboration |

## Professional Experience

**Principal Solutions Architect, AI/ML** at *Rackspace* October 2020 – Current

Previously: Manager, AI/ML October 2019 – October 2020

Previously: Solutions Architect, Big Data & AI/ML June 2018 – October 2019

Shaped AI, ML, and data science solutions landscape for leading organizations by administering the design, development, implementation, and support of end-to-end data products. Identified business opportunities for customers by delivering reference architectures, frameworks, and out-of-the-box solutions. Interviewed, recruited, trained, and supervised solutions architects, data scientists, and data engineers; worked with internal and external VPs, principal architects, product managers, and technical leads.

*Oportun - Fintech Startup, Bay Area*

* Reduced deployment to production time of ML models by 30% by building an Automated Machine Learning Pipeline.
* Built a Machine Learning platform to enable Data Scientists to perform data transformations, build and test ML models.
* Reduced costs by deployed a scalable collaborative notebook environment on K8’s which can be scaled to hundreds of users.
* Increased fraud detection rate by 25% by optimizing and enhancing existing models.

*Amazon.com, Seattle*

* Reduced time taken to transform and aggregate massive amounts of daily log data from 8 hours to under 1 hour.
* Achieved regulatory compliance SLA’s by building and automating processes to derive, aggregate and tag data from multiple different sources including, S3, Redshift, WorkDocs, Sharepoint and 3rd party services.

*Fortune 100 healthcare company, Chicago*

* Optimize and refactor processes to analyze timeseries stock data by utilizing Apache Spark(Data Proc) for distributed processing.
* Currently facilitating rapid model hosting and deployment by overseeing the design and development of a ML Ops pipeline on GCP using Vertex AI, Kubeflow Pipelines, Seldon Core for multi model real time endpoints and Feast.

*Technical Leadership & Development*

* Participate and present at pre-sales meetings with potential customers.
* Design and build POC’s for common use cases, create training and marketing material.
* Developed AI/ML offerings for multiple industries and domains.
* Built technical & operational processes for team members to increase efficiency and effectiveness.

**Lead Big Data Engineer** at *AT&T* May 2016 – July 2018

Managed a team of Data Engineers. Led Big Data Architecture, Engineering and Automation across multiple big data analytics projects. Responsible for interfacing with BU's and Technical leaders to setup processes and standards. Designed, built and implemented data pipelines, tools and data API’s. Worked with Data Scientists to optimize, deploy and automate models.

*Consistent Operations Improvement*

* Achieved data extraction rate of 300K pages/hour compared to 10K average while processing 3M PDF pages within a day. Designed data cleaning techniques and made data searchable for customers.
* Generated actionable customer insights by building a data platform to extract and aggregate client information. Developed an ML automation framework, replaced legacy code with Spark jobs, and enabled swift report and dashboard development.
* Established company-wide best coding practices and systemized process to define project life cycle management strategies.
* Reduced data ingestion time from 3 days to under 2 hours by automating data pipelines.

*Stakeholder Relationship Management*

* Improved value proposition by building marketing pitch desks and conducting open houses to build engagement.
* Prompted customer self-service and quick response times by designing a reporting and analytics UI.
* Increased employee efficiency by defining schedules for team meetings and individual work.

**AVP, Lead Application Developer** at *U.S. Bank* Jan 2011 – May 2016

Previously: Senior Application Developer (02/2012 – 01/2014), Application Developer (01/2011 - 02/2012)

Oversaw application development life cycle on multiple big data and enterprise application integration (EAI) platforms. Led and cross-trained 25-member team to deliver solutions support to 100+ customers.

* Decreased development time from 100+ to ~20 hours, minimized redundant processes, and achieved interoperability for client application. Solution is used by 100+ bank systems to support 500+ web services and 1.5B+ monthly transactions.
* Lowered wire transfer time from 2 hours to near real-time while leading deployment of customer solution in high availability and fault tolerant architecture with a 0% failure rate.
* Increased lead conversion rate by 30% by implementing a data sourcing strategy to generate high quality leads on multiple customer interaction channels. Proposed a big data solution to export multi-source data to a marketing analytics data mart.
* Automated fraud detection, claims prevention, and risk management operations by creating data processing pipelines. System can process 30M real-time events and 40M batch events daily.

**Software Developer** at *Gameloft* 2007 – 2009

Worked in 10-member team to develop cell phone game patches. Collaborated with Testing, Development, and QA teams to create patches for games such as NFL, NFS, Asphalt, Rayman, and Prince of Persia etc...

## Education

**MS, Electrical & Computer Engineering**   *New Jersey Institute of Technology 2011*

**B.Tech, Electronics and Communications Engg**. JNTU 2007

## Techincal Skills

JAVA, Python, REST, Apache Hadoop, Spark, HBase, Kafka, Machine Learning, Artificial Intelligence, Deep

Learning, AWS (EMR, Sagemaker, Lambda, EKS, ECR, Lex, Redshift...), MLFlow, Kubeflow, ETL & Data Warehousing, Lambda &

Kappa Architecture, Feature Selection & Engineering, Distributed Computing, Data Extraction & Preparation, Data Munging

&Validation, Data Discovery & Cleaning, Docker, Kubernetes, Databricks, Azure, GCP, OpenAI, AGI, ChatGPT, LLM’s