

Modassir Akhtar

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Experience

General Electric

Bangalore, IN

SENIOR SOFTWARE ENGINEER (DIGITAL TECHNOLOGY LEADERSHIP PROGRAM)

June, 2017 – Present

- **GE Renewable Energy's IIoT** Digital Windfarm is accelerating reliability at the turbine, farm and fleet level by applying advanced analytics and wind power software. As a Cloud Software Engineer, I led the effort for building scalable components to constantly collect and profile data flows of real time data — weather, component messages, service reports, performance of fleets, etc. and turning the collected data into actionable insights that would impact future architecture decisions. I am also part of a lean team responsible for developing the first version of Digital Wind Farm on AWS.
- **GE Healthcare** is developing Unified Digital Playbook for customers. As part of data engineering, I did research on graph databases, built data pipeline from clickstream weblogs to final graph data store, and ingested data from CRMs to create Knowledge Graph.
- As a part of **GE Transportation** team, I planned and developed PySpark scripts to migrate Digital Thread applications from Greenplum to Hortonworks. I also developed card-based application meant to simplify and digitize the Life Cycle Cost inventory management process to balance demand and supply of Light Work Scope engines.
- As part of **Current by GE**, I led the onboarding of EMS business on Installation Lifecycle Management tool by designing EMS installation job flow. I was also responsible for building a digitized process for end-to-end EMS installation tracking on a single platform leveraging web as well as mobile application.
- **Technologies Used:** gRPC, Kafka, Java, Springboot, AWS, DynamoDB, Kubernetes, Graph Database, Cypher, Neo4J Spark, AngularJS, OIDC, Flask

RiSE

Kharagpur, IN

SOFTWARE ENGINEER

Aug 2015 – Oct 2016

- **RiSE Institute** develops educational tools and provides real time solution to equalize opportunities for students across India. I led the effort to build the dashboard where teachers created tests, assignments and questions. Also, developed the backend API and integrated payment gateway for android mobile app.
- **Technologies Used:** Django, PostgreSQL, AngularJS, ChartJS

TinyOwl

Mumbai, IN

SOFTWARE ENGINEER INTERN

May – July 2015

- **TinyOwl Homemade** is a marketplace for home-chefs, allowing users to order food in their vicinity. As part of the development team, I was responsible for implementing menu planning which reduced the workload of Business Development Executives by 500%. Also, added meal review feature in the hybrid mobile app.
- **Technologies Used:** AngularJS, NodeJS, Firebase, Ionic

Education

Indian Institute of Technology Kharagpur

India

INTEGRATED MASTER OF SCIENCE IN MATHEMATICS AND COMPUTING

July 2012 – May 2017

KVPY Fellowship: Received the Prestigious Kishore Vaigyanik Protsahan Yojana Fellowship from IISc Bangalore

Technical Strength

Programming Languages: Python, Java, JavaScript, C++, SQL, Cypher

Technologies: AWS, gRPC, Kafka, DynamoDB, Kubernetes, Graph Database, PySpark, Firebase, OpenCV

Applied Skills: Big Data Architecture, Microservices, Cloud Data Migration, UI Wireframes

Web Development: Springboot, Django, Flask, AngularJS, Nodejs, NoSQL, REST, HTML, CSS

Projects

Chordal Completion using Minimum Degree Heuristic and LexBFS Algorithm

Graph, Python

Proxy SwitchySharp Chrome Extension

Chrome Extension, Javascript

Gait Recognition using KNN Algorithm

Machine Learning, OpenCV

P2P Search Visualization

NLP, Firebase, Python

Fast Direct Solver for a coupled Laplace and Helmholtz Equation on a Disk

Numerical Methods, Numpy

Lane Following and Shape Detecting Bot (IEEE Workshop)

Robotics, C++