

# Bikash Jha Data Engineer

Leverkusen, Germany 51381 +49 (0) 157 50325815 jhabikash2829@gmail.com linkedin.com/in/bikash-jha/

### **Profile**

I'm a driven data engineer with 5+ years of experience playing with big datasets. I have experience and knowledge in a diverse set of disciplines, technologies and tools like Data Migration, Cloud and data pipelines, and data architecture.

Looking for a career opportunity to apply my skills/experience on challenging projects. Eager to build robust databases that lay the groundwork for revealing game-changing insights for the business. involving extensive use of current IT techniques to contribute productively towards the growth of the company thus growing professionally.

Skills: Data Structures, Algorithm, Serverless, Data Pipelines Technologies: Python 2/3, Spark, Spark Streaming, Elastic, Kubernetes, Docker, Airflow

Databases: MySQL, MongoDB, DynamoDB, PostGre, HBase Big Data: Kafka, Hive, Zookeeper,

Oozie, HBase

Cloud: AWS, GCP

# Experience

### Planet Labs, Germany

### Senior Data Engineer

Feb 2022 - Current

- o Creating infrastructure design to process geolocation data coming from 250+ satellite
- o Implementing engine to process terabytes of geolocation data using Geospark analytics
- o Designing DataLake (Snowflake) and loading the data
- o Maintaining MySQL database on Cloud
- o Storing Latitude & Longitude data to MySQL database as backend of one of our services
- o Storing Spatial data type and schema design on MySQL
- o Creating imagery APIs for google maps used by Google

Tech Stack: MySQL, AWS, CloudWatch, Kubernetes, Python, Kafka, PySpark

#### Homelike Internet GmbH, Cologne, Germany

#### Senior Data Engineer

OCT 2021 - Feb 2022

- Managing 6 different ETL processes to transfer data from MySQL to MongoDB, BigQuery, SalesForce, Snowflake and several Marketing Channels using PySpark
- o Migrating database to Cloud SQL for MySQL by using Database Migration Service
- Migrating MySQL server databases/ existing licenses to Azure SQL Database using serverless framework
- o Designing Snowflake Schema and NoSQL Schema Design best practices.
- o Designing serverless framework for real-time consumption of user tracking data using kinesis
- PySpark and Airflow autoscaling solution with Kubernetes (Helm)

- o POC for a customer: Migration of MySQL to Amazon Cloud (RDS)
- Optimizing Schema for import/instance/monitoring on import process

Tech Stack: MySQL, GCP, BigQuery, AWS, Lambda, Kinesis, SQS, CloudWatch, Kubernetes, Python Migration Tools: PySpark on Kubernetes, DMA, DMS, JDBC Spark Connector

### Aurigo Software Technologies, Bangalore, India

#### Senior Data Engineer

JAN 2021 - SEP 2021

Company Description: Helps state agencies, cities, counties, water authorities, airports, and facility owners plan, build and maintain capital assets, infrastructure and facilities by combining Data Engineering, Democratized Data Science and Data Orchestration (link)

Project: Serverless / Managed AWS services

- Implementation of Amazon Kinesis Firehose to collect Realtime, streaming data
- Designing AWS S3 as the Data Lake to store all Raw Data.
- Setting up AWS Athena to analyze data in Amazon S3 using standard SQL.
- Aggregated report ETL to MySQL from S3 for reporting dashboard
- Kubernetes on AWS EKS Cluster using Cloud Formation Template.
- EKS Cluster Auto-scaler and setting up Amazon ECS for container orchestration.

Project: Microservices Components on Kubernetes.

- Writing Connector Microservices to fetch data from different sources.
- Pyspark/PandasDF/Boto3 Connector/: Twitter, S3 bucket, DynamoDB, Filesystem.
- Dag Engine Microservices: Integration engine for all microservices (ML + Connector)
- Airflow Microservices: programmatically author and schedule their workflows and monitor them via the built-in Airflow user interface.
- Attaching EFS volume mount/AWS RDS instance to Airflow Kubernetes Pods.
- o Fluentd microservices and Elastic stack to fetch/store logs from Airflow.
- o Implementing spark-on-k8s operator pod to run spark jobs on Kubernetes.
- Monitoring Kubernetes cluster health using K8s Dashboard, Prometheus and Grafana.
- Exploring the GCP Platform for future POC's and Kafka Microservice.

Tech Stack: Linux, AWS, Kubernetes, Docker, Python, Airflow, DynamoDB

#### LTI (Larsen & Toubro Infotech), Pune, India

#### Senior Product Engineer

JAN 2020 - DEC 2020

Company Description: LTI Mosaic Decisions Platform

#### Responsibilities:

- Creation of connector service to load data from and to MySql/RDBMS from different sources
- Refactoring existing code and evolving new architecture fit for our existing product
- Writing Connector code using spark/ pySpark / PandasDF for Azure/S3/NO SQL etc
- Kubernetes setup on AMAZON EKS cluster and implementation of key vault (HashiCorp)
- Writing our own Kubernetes API to submit spark jobs on K8s and KubeSpawner APIs.
- Horizontal Autoscaling on Kubernetes Pods and optimization of existing spark Jobs.

Tech Stack: Python, Amazon S3, Azure Blob, Cosmos DB, MongoDB, Kafka, Kubernetes, PySpark

### AMDOCS, Pune, India

Software Developer

AUG 2016 - DEC 2019

Company Description: Platform that implements business logic and Allows the marketer to inject machine learning logic run on a big data—system for any decision that needs to be taken within the experience (Email/Message text etc.)

Project: Auto-ML Product Recommendation

- Setup/Code for consumers/Producer and offset management in Kafka streaming (Listener balancer)
- Cleaning up data and data preparation for Model Creation using Pyspark
- Implementation of ML model (Random Forest/Linear Regression based on demographic data and supervised learning to predict potential customers
- Analysis of target customer feedback and provide insight to marketing team

Tech Stack: Pyspark, Python, MapR, Kafka, Hive, Random Forest

# Education

University Of Kalyani, West Bengal Bachelor of Technology in 2016 Information Technology 2016

Awards: Awarded as Employee of the Month 2017, Awarded as Employee of the Quarter Q2 '18, On-Site Opportunities - Mexico for AT&T and Manila for PLDT.

# Other Interesting Facts

Languages: English (Professional), Hindi (Native), Bengali (C1) Interests: contributing to open Source Platform, Volleyball, Cricket

## Reference

Available upon request