# SIBY ABIN THOMAS

## **Senior Data Engineer**

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Customer focused data engineer with experience in delivering cloud-based data lake projects with a focus on data quality, maintainability, and operational costs.

- 13 years of IT expertise, with a strong background in creating cloud-based data products.
- Crafted high-performance data pipelines with Apache Spark.
- Implemented idempotent and manageable workflows using Apache Airflow.
- Delivered reusable data processing solutions built on an open source technology stack.
- Proficient in AWS data services, with greater expertise in Spark, AWS, Apache Airflow, Python, and SQL.
- Worked in data teams of Fortune 500 companies from onsite & remote.

#### **SKILLS**

Big Data: Apache Spark, HDFS, Pig

AWS Services: S3, Athena, Glue, EMR, RDS, EC2,

Data Pipeline, Step Functions, Redshift,

DMS, Lambda, Cloudwatch **Databases**: MySQL, Redshift

Other Technologies: Pandas, boto 3, Terraform,

Databricks, Deltalake, Dremio

Orchestration: Apache Airflow, Control-M

**Programming Languages: Python** 

Version Control: Github, Bitbucket, Code commit

Cloud: AWS Scripting: Bash ETL: Pentaho

Agile Tools: Confluence, Jira

# **WORK EXPERIENCE | PROJECTS**

# SENIOR DATA ENGINEER - TATA CONSULTANCY SERVICES, KOCHI, AUG 2021 - PRESENT

Project: Data platform product development and support for a leading financial services company in UK

- Authored data lake pipelines using Apache Spark in AWS Cloud.
- Collaborated with data science teams to improve model accuracy by implementing additional data quality checks using Python, pandas, Jupyter and Apache Airflow.
- Increased the efficiency of support services by building a dashboard on top of audit information.

#### SENIOR DATA ENGINEER - INFOSYS, TRIVANDRUM, MAR 2013 - JULY 2021

Project 1: Deltalake development for a leading fashion brand in USA (Feb 2021 - July 2021)

- Prepared the Bronze, Silver, and Gold layer delta tables for customer data from Segment processed using Pyspark.
- Streamlined the existing approach to set up the feature store on top of delta tables and orchestrated the workflow using Apache Airflow, avoiding manual interventions and better data quality
- Automated the spark code deployments to Databricks using python packaging and wheel files.

# Project 2: Re-architecture & cloud migration of Data platform for major US client (Jan 2019 - Jan 2021)

- Crafted over 100 spark jobs using Pyspark to perform complex data transformations between ingestion and the refined layer (S3).
- Reduced cloud operational costs by 30% by moving workloads to transient clusters and implementing best practices for spark memory utilization.
- Created AWS CLI-based utilities to scale the EMR clusters up or down, create glue tables, and run crawlers.
- Improved operational efficiency through the use of dynamic airflow dags to orchestrate spark jobs.
- Managed 3 engineers' deliveries and mentored them in data engineering, Airflow, and Apache Spark.

#### Project 3: Data Product development for a leading Loyalty Analytics company in UK (Jun 2016 - Dec 2018)

- Built a reusable ETL framework based on metadata ingestion that allowed the client to make data processing without having an in-depth knowledge of Pentaho, saving the customer 40% on development costs.
- Enhanced data product sales by building integrations with campaign management products from IBM.

- Migrated historical loyalty & campaign data to Redshift for a renowned Australian bank using AWS DMS.
- Supervised data platform releases and wrote the framework documentation.
- Received STAR award from client for individual contribution to Data Platform design and architecture.

# Project 4: Datawarehouse modernization for a leading US retail client (Apr 2013 - May 2016)

- Gathered requirements, designed, and designed highly customizable and maintainable ETL solution using an open technology stack (Pentaho/MySQL/Python).
- Rearchitected analytical solution with open source technologies, assisting the organization in lowering operational/licensing costs.
- Delivered dashboards and reports with actionable key performance indicators(KPI) to stakeholders, assisting them in making decisions to drive profitability for the business.
- Trained and grew both vendor and client offshore teams on Pentaho

## **SOFTWARE ENGINEER - SATMETRIX , BANGALORE, SEP 2010 - MAR 2013**

- Accelerated customer implementations by 3x using tools/plugins created in python and automating the workflows using them.
- Contributed to organizations talent pool by recruiting and mentoring interns.
- Delivered NPS program for key customers, ING & Experian.

## SOFTWARE ENGINEER - RYANCOM INFOTECH, BANGALORE, APRIL 2009 - SEP 2010

- Developed several modules for the CRM product using VB6 and managed 100+ client implementations, support and customer training.
- Developed a POS (Point of Sale) product in 40 days using C#.net, DevExpress tools and MSSQL.

### **OTHER PROJECTS**

- Built a personal technical blog (<a href="https://blogs.sibyabin.tech">https://blogs.sibyabin.tech</a>) using GitHub pages and Jekyll.
- Delta lake website (<a href="https://github.com/delta-io/website">https://github.com/delta-io/website</a>) contributor.

#### **CERTIFICATIONS**

- Databricks Certified Associate Developer for Apache Spark 3.0: Databricks, August/2022
- Databricks Lakehouse Fundamentals: Databricks, July/2022
- Apache Airflow DAG Authoring: Astronomer, June/2022
- Amazon Web Services Cloud Practitioner: Amazon Web Services, May/2021
- Apache Airflow Fundamentals: Astronomer, March/2021

## **AWARDS**

- Most Valuable Player: Awarded 3 times at Infosys for excellence in project delivery.
- **STAR Award 2018**: Awarded by client AIMIA, considering the individual contribution to its global data platform design & architecture.
- Customer Focus Award: Awarded by Satmetrix in 2011 for successful implementations of their key customers ING & Standard Life in a short span and making them valuable customers.

#### **EDUCATION**

- Master of Computer Application Bharathiar University, India with 83.5%
- Bachelor of Science M.G University, India with 85.4 %