

# Nitish Raj

Luxembourg, LU • raj\_nitish@outlook.com • linkedin.com/in/nitish-raj • github.com/nitish-raj

---

## Data/Analytics Engineer Summary

- 8+ years' experience in problem solving with Python, SQL, AWS, and statistics. Lead a 3-member team for setting up analytics frameworks, data modeling, and developing KPIs for strategic business decisions.
- Improved data (ETL) pipeline efficiencies by utilizing Spark systems and RDBMS-based platforms, optimized algorithms to improve work efficiency and standard error by >20% and saved the equivalent of 3+ full-time resources.
- Skilled in data visualization, dive deep analysis, and statistical modeling. Achievements include recovering \$7M+ in revenue and boosting customer retention by >10% by developing ML-optimized marketing campaigns.
- Proficient in handling large volumes of data and complex processing requirements. Knowledge of distributed computing systems, including Hadoop and Spark, as well as producer-subscriber event processing systems

## WORK EXPERIENCE

---

### Amazon, Luxembourg

08/2018 – Present

#### Senior Business Intelligence Engineer

- Hands-on experience with engineering principles and best practices for data modelling, test-driven development, and documentation. Implemented CI/CD using AWS resources and internal tools resembling dbt, GitLab, and GitHub Actions.
- Developed PySpark ETL for a REST API, which enabled a system to monitor KPIs. This resulted in a feedback loop that reduced critical escalations by >60%.
- Led end-to-end data modeling for OLTP and OLAP systems for WebApp based on Python (Django) and AWS (Lambda, Glue, Redshift), used by 300 FTEs globally (5 countries) that improved throughput by >50%.
- Collaborated with 6+ teams to establish 40+ KPIs. Developed data pipelines (using Spark and Redshift), reducing reporting delays from 10 days to just 1. Saved \$7M+ in 6 months by proactively tracking and addressing false negatives.
- Developed ML algorithms (in AWS Sagemaker) to optimize the product classification, improving accuracy by >15%. Implemented the ETL process using Amazon's internal Spark-based tool and Data Lake
- Optimised sampling algorithm that reduced standard error by 20%, conserving an equivalent of 3+ FTEs and improved error identification rate from 5% to 10%.
- Established core KPIs to drive enhancements and collaborated with cross-functional teams to conduct in-depth analyses for data deviations, aiding in agile planning for future operations.
- Contributed to team development through 100+ technical interviews, providing professional mentorship and leading team of 3 BI engineers/ analysts.

### Mu Sigma Business Solutions Pvt Ltd, India

07/2015 – 07/2018

#### Decision Scientist (Consultant)

- Engineered machine learning models for precision-targeted marketing campaigns, leveraging the Net Promoter Score (NPS) and customer behavior data, resulting in an impressive >10% improvement in customer retention rates.
- Promoted a data-led strategy for multi-channel attribution, identifying high-yielding customer journey channels and optimizing spend, resulting in an average 8% reduction in customer acquisition costs.
- Established critical KPIs for comprehensive pre- and post-value-add analysis and implemented A/B testing for credit card offers, enhancing operational efficiency through automated reporting in Tableau.
- Executed time-series analysis to classify transactions and isolate anomalies, providing decisive insights through Tableau visualizations.
- Designed an innovative data architecture for tracking European market spending and transaction metrics, successfully navigating the complexities of unstructured and multilingual data using Qlik and SQL.

## EDUCATION

---

### Bachelors of Engineering in Computer Science

09/2011 – 05/2015

Siddaganga Institute of Technology, Karnataka, India

## SKILLS

---

**Tools:** Docker, Git, dbt, SAS Miner, Terraform | **Programming:** Python, R, SQL, PySpark, SAS | **Cloud:** AWS (Redshift, Lambda, EC2, Sagemaker, RDS, Glue, Elastic Beanstalk, SNS, CloudWatch, DynamoDB, Route 53, CDK), GCP (BigQuery, Compute Engine, Cloud Storage), Databricks, Snowflake | **Machine Learning:** Scikit Learn, Pytorch | **Business Intelligence:** Tableau, QuickSight, Qlik, Metabase, Looker, Power BI | **Languages:** English (Fluent) , French (Basic – A1)