

# Karthik Raj

## LEAD DATA ENGINEER

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*"Be the change you want to see in the world"*

## Summary

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7.5+ years of experience in Big Data Technologies (Scala, Apache Spark, SQL and NoSQL), Python, React JS, Data Structures and Algorithms, Shell Scripting, Java, React, Mobx, and Node JS.

Super nerd who loves Vim, Linux, and OS X and enjoys customizing all of the development environments. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools.

## Skills

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- Languages - Python, Scala, Javascript
- Big Data - Spark, Kafka, Hive
- Databases - PostgreSQL, MySQL, MongoDB, AWS DynamoDB, Neo4J
- Notebooks - Zeppelin, Jupyter
- Web Frameworks - Django, Flask, FastAPI
- Devops - Shell Scripting, Docker, Kubernetes

## Work Experience

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### Softborne Technologies Private Limited

LEAD DATA ENGINEER

*1 Year 4 Months*

*Nov-23 to Present*

- Built various connectors to support the data collection from multiple platforms.
- Worked on React to integrate a data mapping screen where users can select/pick the fields based on the requests.
- Worked on the internal Python client library to support data ingestion via GRPC.
- Worked on the GCP Services like GCS, Pub-Sub, BigQuery, Cloud Run and Log Explorer.

### Constellation4 Health

TECHNICAL LEAD - DATA ENGINEERING

*3 Years 3 Months*

*Jul-20 to Oct-23*

- Built a snowflake data model to accommodate the Provider Network of US.
- Created an interactive dashboard to show real-time analytics to end-users.
- Built a real-time pipeline to process data using Azure Cosmos DB.
- Worked with Django Web Framework to interact with the Azure Cosmos DB and React.

### Tiger Analytics Private Limited

SENIOR BIG DATA ENGINEER

*8 Months*

*Dec-19 to Jul-20*

- Converted code to run on distributed platforms like SQL to spark SQL.
- Warehoused the data from DB's like AWS Athena, and Netezza to a commonplace.
- Converted SAS code to Python.
- Configured AWS Services like Lambda, Kinesis, EC2, S3.

### Codehall Technology Private Limited

JUNIOR BIG DATA ENGINEER

*1 Year 6 Months*

*Aug-18 to Dec-19*

- Built Dynamic and ETL Pipelines on top of Distributed Cloud Platform.
- Real Time Analytics using Apache Kafka and Apache Spark to get meaningful Insights from Dynamic Data.
- Report Creation and Data Visualization using Thoughtspot and Metabase.
- Built a Model to serve Recommendations for E-Commerce Sites like Walmart, Neiman Marcus.
- Configured AWS Services like Lambda, EC2, S3.
- Developed the product using Agile Development Process.

## Green Mile Tech.

### SOFTWARE DEVELOPMENT ENGINEER

1 Year  
Aug-17 to Jul-18

- Created a desktop application single-handedly for analysing reports.
- Built the Analytics Platform to increase the efficiency of the Production Line.
- Worked on Front-End Frameworks like Electron.js, Video.js, DC.js, and Material Design.
- Built a Back-End Server using Django REST Framework with Serializers and Mixins.

## Projects

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### MAKEMYTWEET - LEAD DATA ENGINEER

1 Year 10 months

- Scrapped data related to crypto currencies from Social Media Platforms like Twitter.
- Created a real-time analytics dashboard for the users to get the current stats on crypto currencies.
- Tech Stack Used - Snowflake, Amazon Web Services, Python, Apache Kafka, Django REST Framework, MongoDB.

### NEUROLITEN - DATA ENGINEER

1 Year 2 months

- Created real-time pipelines for analytics in the healthcare domain with advanced security.
- Understanding the Healthcare Industry Standards and applying the FDA approved solutions in Big Data.
- Tech Stack Used - Snowflake, Amazon Web Services, Kafka, Scala, Python, Django REST Framework, RNCryptor, FHIR Standard Formats.

### DATA ENGINEER - JOB SUPPORT

3 months

- Supporting a working professional on daily basis to meet deadlines.
- Understanding the architecture in a short period to help the professional with the right direction.
- Tech Stack Used - node.js, Scala, Apache Spark, IBM DB2, Kubernetes, Mongo DB, GCP, BQ, Python, Flask

### BILLTREE - A RETAIL DESKTOP BILLING APP

8 months

- Desktop App for billing products based on the categorical level.
- Integrates with all types of payments and works offline.
- Integrates with most scanners and printers for billing purposes.
- Tech Stack Used - node.js, electron.js, Django Rest Framework, Razorpay SDK, GCP, BQ, Data Analytics and Visualization.

### DEVOPS ARCHITECTURE

4 months

- Developed a new pipeline where all microservices are deployed in a containerized environment.
- Deployed Gitlab Runner in a sandbox environment.
- Deployed a Load Balancer to handle the production Data.
- Tech Stack Used - Scala, Gitlab CI, AWS EC2, AWS Elastic Kubernetes Service, Kafka, Data Analytics and Visualization.

### EFFUTZ - ADVANCED ANALYTICS DESKTOP APP

1 Year

- Desktop App to minimize the production line timings for large-scale industries.
- Created an interactive dashboard to view all the key points.
- Managed all the incoming data using a real-time pipeline for the real-time dashboard.
- Created a page to analyze the production line video and used it to tag the videos.
- Tech Stack Used - node.js, electron.js, Django Web Framework, video.js, dc.js.

## Education

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### M.Tech in Data Science and Engineering

2019 - 2021

#### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE

- Statistical and Business Analysis for Data Science.
- Implementation of Artificial Intelligence.
- Data Structures and Algorithms.

## B.E. in Electronics and Communication Engineering

2014 - 2018

IRTT (INSTITUTE OF ROAD AND TRANSPORT TECHNOLOGY)

- Application of Mathematics and Science in Engineering Aspects.
- Won Inter College Chess Championship.
- Served as a Student Coordinator, Boot Camp Trainer for Cutting-Edge Technologies.

## Certifications

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### Big Data

Certificate

COGNITIVE CLASS AI

### Hadoop

Certificate

COGNITIVE CLASS AI

### Machine Learning in Python

Certificate

COGNITIVE CLASS AI

### Spark ML Lib

Certificate

COGNITIVE CLASS AI