

# Sandhya Raghavan




Engineering Manager, Data and Analytics

## Contact








 [raghavansandhya@gmail.com](mailto:raghavansandhya@gmail.com)  
 [linkedin.com/raghavansandhya](https://linkedin.com/raghavansandhya)  
 [github.com/raghavansandhya](https://github.com/raghavansandhya)  
 Bangalore, Karnataka, India  
 +91 9008732338  
 [raghavansandhya.github.io](https://raghavansandhya.github.io)

## Skills







### Coding

Python/SQL   
Shell Scripting/Scala/R   
Go/JavaScript(learning) 





### Big Data/ETL

Spark/Hadoop/Map Reduce   
Kafka/NiFi/Active MQ   
Ab Initio ETL/MHUB/BRE   
PostgreSQL/Oracle/Teradata   
Hive/Yarn/Zookeeper   
Cassandra/Mongo DB/Influx   
HBase/AWS Redshift/Presto 





### Data Science/ML & Visualization

Pandas/Numpy/Shapely   
Plotly, Tableau, Seaborn, DASH   
Regression Models, NNs   
CNNs, XGBoost, kNN, SVM   
Time Series Forecasting   
Keras/Tensorflow/Pytorch 

### Dev Ops/Automation

Docker/Airflow/Jenkins   
AWS S3, EC2/Databricks   
Cloudera/HortonWorks   
Kubernetes(learning) 

### Collaboration & Management

GIT/ JIRA/ Confluence   
Agile/ Waterfall Models   
Project Management   
Product Management 

A self-driven and enthusiastic software engineer passionate about Data and AI solutioning for complex business problems. Have 10+ years experience in leading, managing, mentoring and growing large teams of software and data engineers in multiple organizations.

## Experience

15 Years

### Sr. Manager, Data Engineering and Analytics

#### Virgin Hyperloop

April 2019 – Present

Part of the Machine Intelligence and Analytics Team which is responsible for creating automated solutions including Demand Prediction, Real time Trip Management, Command and Control Software, Optimized Alignment Generation and Hyperloop Simulations. Video showcasing our work [[link](#)].

- Managing a team of 4 data engineers and scientists providing leadership and mentorship
- Designed, built, and maintained a cloud-based infrastructure for mass scaled AI simulation executions and batch analysis resulting in **50x** faster time-to-insight for executives' reports - from 6 months to 3 days
- Created a GIS data pipeline using packages like GeoMesa, Geopandas, GeoSpark, Rasterframes that provides suitably formatted data for generating optimized alignments
- Currently working on setting up an Enterprise Level Data and Analytics Organization at VH that gathers, catalogs, and governs data from all the software and hardware engineering and business teams

### Data Architect/Lead Data Engineer

#### Citi/Wells Fargo (consultant/Director ITI Data)

Nov 2011 – Apr 2019

Part of the Global Finance Technology Services team at Citi and Credit Risk team at Wells Fargo. Created several data extraction, warehousing and reporting frameworks with logging and support.

- Led a team of 8+ members both onsite and offshore in an Agile environment, holding daily standup calls and managing daily tasks
- Built highly scalable, distributed systems using different open-source tools and traditional ETL tools. Created many reusable templates that reduced development efforts and cost to 1/5<sup>th</sup> the original
- Exposed the data quality metrics and lineage on Critical Data Elements as part of Data governance and Basel requirements

### Lead Data Engineer

#### Capital One (consultant Wipro)

Sep 2006 – Nov 2011

Created ETL process in Ab Initio for several data processing and migration projects. Part of Card Data Warehouse, Auto Finance, Mortgages and Digital Analytics teams. Worked as Lead/Onsite coordinator for several projects.

## Education

### B.E Computer Science

2006

Anna University

Full list of my employment and projects on [linkedin.com/raghavansandhya](https://linkedin.com/raghavansandhya).

List of my talks, patents and additional course work on my [profile](#).