

Dr.K.Sashi

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Location: Coimbatore, INDIA

Educational Qualification : **M.C.A., M.Phil., Ph.D.,**

Experience Summary

15+ years of rich experience in teaching and 2 + years of experience in development and corporate training. Pursuing excellence in Mobile Applications, Web Applications, Cloud Computing - AWS, Big Data and Data Science.

Research Area of Interest

- Grid Computing
- Cloud Computing
- Data Science
- Big Data
- Data Mining
- Machine Learning
- Neural Networks and Deep Learning
- Computer Vision - Content Based Image retrieval

Work Experience and Research Activities

Duratech Solutions – Coimbatore
R & D Head

June 2016 – Till Date

- Managing End-to-End the R&D efforts at Duratech Solutions
- Working on Cutting edge bleeding Edge Technologies on Machine Learning, Artificial Intelligence (AI) and Deep Learning
- Expert in R & Python Programming, Tensorflow, Keras, Theano, Pytorch
- Mentoring coordinating with the Application teams to implement the Research findings and building new products that are easily Re-trainable using Machine Learning (ML) and AI
- Taking new research Initiatives and channeling R&D efforts in the most promising projects

Research Activities:

- Merging GANs with One Shot Learning
- Merging GAN with A3C (Asynchronous Actor Critic) and Queue Learning
- Making Chat bots learn faster and retain Rare events in the training phase
- Exploring ARS (Augmented Rand Search)
- Merging ARS with Deep Learning networks and GANs

SNR Sons College – Coimbatore
Associate Professor

August 2000 – May 2016

- Worked as Associate Professor in Department of Computer Science and Application at S.N.R. Sons College, Coimbatore

Research Activities:

- Completed Ph.D in Grid Computing
- Presented Papers in International conferences(IEEE, ACM, Springer)
- Published Journal Papers in highly reputed International journals with good impact factor(Scopus Indexed)
- Co-chaired a Session as a Resource person in the IEEE Sponsored International Conference on “*Data Storage and Data Engineering(DSDE)*” Bangalore.
- Reviewer for Reputed International Journals - Springer and Elsevier
- Provided Guidance for Research Students

Current Research Activities

Deep Learning - Content Based Image Retrieval(CBIR), SSD, GAN, Stacked GANs, One Shot Learning

Technical Skills

Operating System	Windows, Linux
Programming Languages	C, C++, Java, Python, Scala, PHP, R
RDBMS	MYSQL, Oracle
NDBMS	MongoDB, HBase
IDE	Eclipse, Android Studio, Anaconda
Web Services	RestAPI, Spring
BigData Platform	Cloudera, Ambari
Hadoop Ecosystem	MapReduce, Yarn, Hive, Pig, Zookeeper, Spark, Kafka, Sqoop, Flume

Cloud	AWS (EC2, S3, IAM, Route53, RDS, Glacier, AWS-CLI, Auto Scaling)
Web Framework	FLASK
Mobile Applications	Android

Professional Summary

Big Data :

- Knowledge of Hadoop architecture and various components such as HDFS, Pig, Hive, Hbase, Sqoop, Flume, Zookeeper, Kafka, Spark and Zeppelin.
- Experience in architecting Big data solutions using Data ingestion, Data Storage, Processing and Analysis.
- Worked with both cloud based Distributions (AWS , Google Cloud) and in house distributions Cloudera and Hortonworks.
- Experience in setting up the Hadoop clusters, both in-house and as well as on the cloud.
- Designed HIVE queries & Pig scripts to perform data analysis, data transfer and table design to load data into Hadoop environment.
- Experience in Writing Producers/consumers and creating messaging centric applications using Apache Kafka.
- Experience in transferring Stream(Network/Local) to HDFS and Local Stream using Flume.
- Knowledge and experience in job work-flow scheduling and monitoring tools like Oozie and Zookeeper.
- Worked with Spark Streaming analysis done over flume

Machine Learning, Artificial Intelligence:

- Python & R
 - Supervised ML: Linear, Multivariate, Polynomial Regression, Logistic Regression, Support Vector Machines, Decision Trees, Random Forrest, Naïve Bayes, K Nearest Neighbours, Gradient Boosted Trees
 - Unsupervised ML: Kmeans Clustering, Hierarchical Clustering, Apriori, Dimensionality Reduction using PCA & LDA, Web scrapping, Natural Language Processing(NLP), Boosting & Bagging.
- Neural Networks & Deep Learning
 - Artificial Neural Networks, Convolutional Neural Networks(CNN), Generator Adversarial Networks(GANs), AutoEncoders, R-CNN, Faster RCNN
- Computer Vision
 - SSD, OpenCV, GAN Based Image Generation
- Platforms - TensorFlow, Keras