



S.A. Engineering College a leading state-of-the-art educational institution had set-up, Center for Excellence - Big-Data and Cloud Computing Lab funded by Department of Science and Technology under FIST scheme, Govt. of India in the year 2014, within its college premises. The Big-Data and Cloud Computing Lab aims to carry-out Research & Development for the Students as well to support the Industries through Consultancy works.

With the aforesaid facility, institution has established its own IT-HUB, in order to offer high quality training & Internship programs for Students and Software Professional to enrich their knowledge in the thrust areas and prepare them for highly-skilled jobs in emerging technologies, such as cloud computing, health-care informatics, finance, data integration, data analytics and software testing, for IT industries.

The lab consists of a server room and attached with 250 clients PC's,  
Lab equipped with,

**DELL R930 Server of configuration:**

- Intel Xeon E7-4809 v4 2.1GHzDual Processor (8 Cores in each processor)
- 256 GB DDR4 Max Mem 1866Hz
- 25 TeraByte HDD
- Dell Monitor 19" inch with KB and Mouse
- Aten CS1308 (8-Port USB/PS2 Combo KVM Switch with 8nos of cables)
- 27U Rack with accessories

**Each of the 250 Client in the Lab consists of:**

- Lenovo Desktop Corei5
- 8GB DDR3 RAM
- 500 GB SATA HDD
- Lenovo LCD 18 inch TFT Monitor

**Courses Offered:**

- ✓ Big DataAnalytics, Virtualization &Hadoop
- ✓ Software Testing& Automation
- ✓ Data Analysis - Tableau, Excel
- ✓ Cloud Engg. & System Admin.
- ✓ PYTHON

**Note:**Duration of course is 120 Hrs, only on weekends, with an nominal fee from



## **CENTRE FOR EXCELLENCE - BIG DATA AND CLOUD COMPUTING LAB**

Big data technology supports search, development, governance and analytics services for all data types—from transaction and application data to machine and sensor data to social, image and geospatial data, and more.

To gain the competitive advantage that big data holds, you need to infuse analytics everywhere, make speed a differentiator, and exploit value in all types of data. We have an infrastructure that can manage and process exploding volumes of structured and unstructured data—in motion as well as at rest—and protect data privacy and security.

### **Private Cloud Infrastructure**

To relieve the pressure that big data is placing on their IT infrastructure, we deploy big data and analytics solutions on our private cloud, to achieve the scalability, flexibility, expandability and economics that will provide competitive advantage into the future.

### **RESEARCH**

*The following are some of the Ongoing Research projects in our lab funded by various funding agencies,*

1. Detection and Discrimination of Coral Reefs using Hyper Spectral Data” Funded by DST for amount of Rs. 9.85 Lakhs.
2. Design & Development of off-line Analysis Software for Automotive Trial/MBT Tank, funded by CVRDE - for Rs. 11.5 Lakhs (in pipeline)

### ***Proposals Submitted,***

1. Interactive Big Data Management to improve Quality Health Care, to DST-BDI for Rs. 41 lakhs