



BACHELOR OF SCIENCE IN DATA SCIENCE

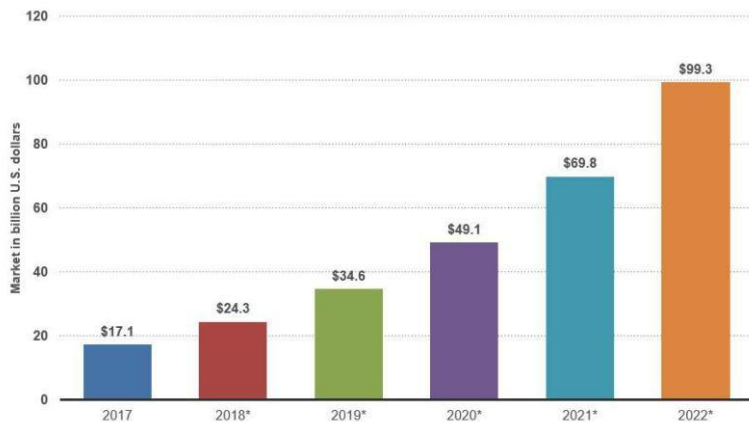
**Bunts Sangha's
S M Shetty College of Science, Commerce and
Management Studies, Powai, Mumbai
www.smsheettycollege.edu.in
Contact ☎ 022 61327352/56/63**

DATA SCIENCE & INDUSTRY TRENDS

Data scientist is one of the most trending job titles in the current marketplace. Without the evolution of Data Science, organizations won't be able to collect all the valuable data and the talent shortage in the domain makes it even more difficult for any organization to hire right Data Scientists for their overall growth and development.

Big Data and Hadoop Market Size Forecast Worldwide 2017-2022

Size of Hadoop and Big Data Market Worldwide From 2017 To 2022
(in billion U.S. dollars)



Amazon is a wonderful example of how helpful collected data can be for the brand as well as its consumers. Amazon's data sets keeps a reminder of what the customer has purchased, what they've paid for, and what they last searched. This helps Amazon as a brand to provide customized homepage views, fitting the needs of its customers. For example, if your last search was about a watch, shoes and bags, then Amazon will restrict its ads or product recommendations to your needs instead of popping other things on your screen.

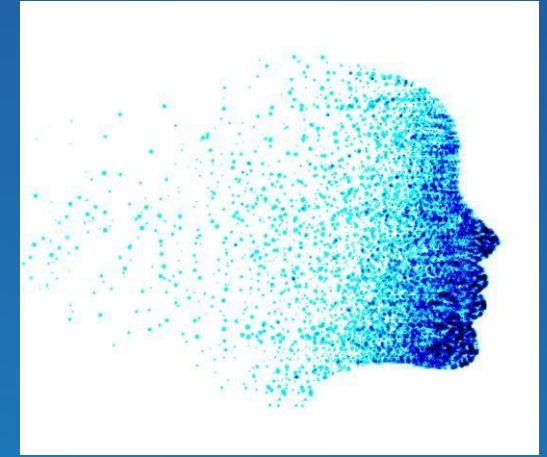
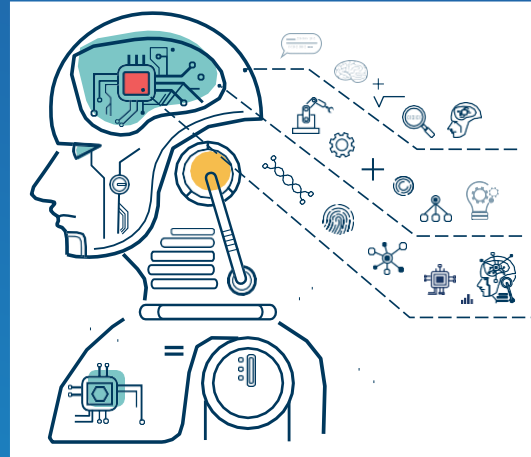
In the recent data shared by McKinsey Global Institute, they found that big data can increase a retailer's profit margin by 60 percent, and "services enabled by personal-location data can allow consumers to capture \$600 billion in economic surplus," meaning they are able to purchase a good or service for less than they were expecting.

In a 2015 speech, Economist and Freakonomics author Steven Levitt stated that CEOs know what they are missing out on the importance of Big Data, but they do not have the right resources available at the moment to perform the tasks. He said, "I really do believe still that the combination of collaborations with firms' big data and randomization is absolutely going to be at the center of what economics is and what other social sciences are going forward."

Data Scientists tend to handle a variety of important tasks, from collecting all the data to cleansing and organizing the enormous yet varied data so that it can be used effectively by the organizations. The role of a data scientist also includes designing and testing various algorithms, building and deploying machine learning-based solutions for smooth functioning, analyzing data for patterns and communicating findings to business stakeholders.

DATA SCIENCE & INDUSTRY TRENDS

MDI Group has come up with an exclusive P.G. Programme for working professionals who are willing to shift their career into Data Science. The programme is divided into three stages; Executive Development Programme in Business Analytics, Executive Development Programme in Machine Learning & PG Certification Programme in Data Science; you will receive



a certification after clearing each stage.

Pursuing a career in data science is a smart move, not because it is trending at the moment but also because of the talent scarcity in the domain, which also leads to great pay.

"Data scientists are highly educated—88 percent have at least a master's degree and 46 percent have PhDs—and while there are notable exceptions, a very strong educational background is usually required to develop the depth of knowledge necessary to be a data scientist," reports KDnuggets, a leading site on Big Data.



TOOLS USED



ABOUT COLLEGE



Bunts Sangha, Mumbai was established in 1927 as a Charitable Trust and devoted itself to the cause of education, health care and social reforms of downtrodden and underprivileged class of people. The Sangha has been in the service of people for almost ten decades. During the last decade, more emphasis was given to the education of the masses. Bunts Sangha's S.M. Shetty College of Science, Commerce and Management Studies was established in 2008 by Bunts Sangha, Mumbai. The college is affiliated to University of Mumbai. Bunts Sangha's S.M. Shetty College of Science, Commerce and Management Studies is committed to the promotion and propagation of quality education with excellence. Currently the college offers B.Com, B.B.I., B.A.F., B.M.S., B.M.M., B.Sc.IT. Bsc Data Science, M.Com (Advanced Accountancy) and M.Sc.IT. programmes with around 2,500 students on roll. College has approved Ph.D. centre in Commerce leading to Ph.D. degree. College looks forward eagerly to a continuing and creative engagement in the field of education with the challenges of time. It has been accredited by NAAC with 'A' grade and is ISO 9001 : 2015 certified.



PROGRAMME SPECIFIC OUTCOMES

- Build a strong foundation of statistics for data science.
- Use all the features and new updates of Python and R for data science.
- Perform scientific and technical computing using the Python SciPy package and its subpackages Integrate, Optimize, Statistics, IO, and Weave.
- Gain expertise in mathematical computing using the NumPy and Scikit-Learn package
- Gain an in-depth understanding of data structure and data manipulation
- Understand and use linear and non-linear regression models and classification techniques for data analysis
- Obtain a comprehensive knowledge of supervised and unsupervised learning models such as linear regression, logistic regression, clustering, dimensionality reduction, KNN and pipeline
- Master the concepts recommendation engine, time series modelling, gain practical mastery over principles, algorithms, and applications of Machine Learning
- Learn to analyse data using Tableau and Power BI and become proficient in building interactive dashboards
- Understand deep reinforcement learning techniques applied in Natural Language Processing
- Understand the different components of the Hadoop ecosystem and learn to work with HBase, its architecture and data storage, learning the difference between HBase and RDBMS, and use Hive and Impala for partitioning
- Understand MapReduce and its characteristics and learn how to ingest data using Sqoop and Flume



COURSE PEDAGOGY

The program is 3 years Bachelors degree course consists of 6 Semesters of offline sessions delivered by S M Shetty teachers. A combination of Cases, Exercises, Lectures, Project Work and Hands-on Practice using analytics tools will be used.



ELIGIBILITY

Any student who has completed HSC or equivalent in Arts / Science / Commerce / MCVC with Mathematics or Statistics as one of the subjects.

Any student who has completed Diploma in IT / CS/ Electrical / Electronics / Mechanical / Civil / Electronics and Telecommunication / Instrumentation and allied branches from MSBTE or equivalent board.

Any student who has completed HSC or equivalent in Arts / Science / Commerce / MCVC without Mathematics or Statistics will have to undergo a bridge course of 30 hours on Mathematics and Statistics

HSC passing Marks: 40% and above



PROGRAMME SCHEDULE

3 years Bachelor's degree course
Regular College hours

Course Commencement Date: 25th Aug, 2022



HOW TO APPLY

To apply, students can register at
www.smsheettycollege.edu.in
or call at **022 61327352/56/63**