# SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER



# DEPARTMENT OF COMPUTER SCIENCE

## 2019-20

**DEPARTMENT OF COMPUTER SCIENCE
SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER**

# EDUCATIONAL VISIT

## ON

### 12TH JULY,2019 AT  8:00AM

**BHARTIYA SKILL DEVELOPMENT UNIVERSITY, JAIPUR**

IS ORGANISING THE THIRD EDITION OF
THE INDIA'S BIGGEST OPEN INNOVATION MODEL.



## SMART INDIA HACKATHON (SIH 2019)

THE INTERESTED STUDENTS SHOULD SUBMIT THEIR NAMES
TO MA'AM RITU BHARGAVA ON/BEFORE 08.07.2019

# Report

**Name of the Department:** Computer Science

**Name of the Activity:** Educational Visit for Hardware Hackathon at Bhartiya Skill Development University, Jaipur.

**Date**:12<sup>th</sup> July 2019

**Total Number of the Students:**26

**Venue:** Bhartiya Skill Development University, Jaipur.

**Report:** The faculty members of the Department of Computer Science along with 26 Students of Computer Science visited the grand finale of the third edition of the India's biggest Open Innovation Model, Smart India Hackathon(SIH 2019), Hardware Edition which was conducted from July 8<sup>th</sup> to July 12<sup>th</sup> 2019.Our students attended the event on 12<sup>th</sup> July 2019 at 11:00 am. Our students interacted with different teams with different set of knowledge and learned about different innovative ideas and technological concepts.
The event proved to be very informative and was a different experience for the students.

# Learning Outcomes:

1. This educational visit helps in developing overall personality of students.
2. This visit also provide an opportunity to students to evolve and be on their own which helps make them independent Interactions with people outside helps improve communication skills and makes them more accommodating.
3. It also helps in application of ideas, theories & knowledge which ensure competence. Discussing during the trip help the students to find solutions to real life problems and makes them innovative.
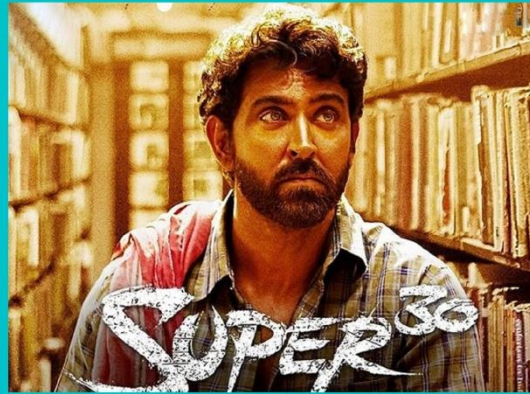
# DEPARTMENT OF COMPUTER SCIENCE
# SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER

# MOVIE SHOW



**GIVING MOVIE ENTHUSIASTS THE CHANCE TO WATCH THEIR FAVOURITE MOVIE**

Date: July 31 2019

Time: 9:30 AM

Venue: The Maya Mandir Theatre

**STUDENTS CAN SUBMIT THEIR NAMES TO MA'AM KIRAN BHAGNANI ON/BEFORE 24.07.2019**

# Report

**Name of the Department :** Computer Science

**Name of the Activity :** Visited Maya Mandir Cinema Hall to watch Super30

**Date:**31st July 2019

**Total Number of the Students:**92

**Venue :**Maya Mandir Cinema Hall, Ajmer.

**Report :** The Department of Computer Science watched super30 at Maya Mandir cinema hall, Ajmer on 31st July 2019. This movie had an inspirational impact on the students and teachers. The Movie revolved around the story of a mathematics teacher and educator Anand Kumar as well as his educational program of the same name. The movie entertained the students and the faculty members as well as taught them many life lessons, which they will surely practise in their real life.

Review competition after watching the movie was also kept in which the students were asked to write a review of the movie in the most creative manner. And the winners were given Certificates.

## Learning Outcomes:

1. Films can show students how different people, in different parts of the world, live their lives. This can be particularly useful in subjects like geography and social studies.
2. Students develop a broadly interdisciplinary approach to an understanding of film and its role in society.
3. Students develop basic competence in some format associated with visual media—digital video, digital music, screenwriting, photography, or animation

**DEPARTMENT OF COMPUTER SCIENCE**
**SOPHIA GIRLS' COLLEGE**
**(AUTONOMOUS), AJMER**

**IS ORGANISING A**

# SYMPOSIUM

## ON

# DATA ANALYTICS AND MATLAB

**RESOURCE PERSON:**
**MR. AKHILESH KUMAR (PROJECT ENGINEER)**
**DESIGN TECH PVT. LTD., NEW DELHI**

**DATE: 13TH AUGUST,2019**
**TIME: 10 AM ONWARDS**

**VENUE : COLLEGE AUDITORIUM**

# Report

**Name of the Department:** Computer Science

**Name of the Activity:**Symposium on Data Analytics & Computer Vision

**Date:**13th August 2019

**Total Number of the Students:**78

**Venue:**College Auditorium, Sophia Girls' College (Autonomous), Ajmer

**Resource Person:** Mr. Akhilesh Kumar

**Report:** The Department of Computer Science organized a one day Symposium on "Data Analytics & Computer Vision" for the students of Computer Science Department on 13th August 2019 at 10:00 am in the College Auditorium. The resource person for this symposium was Mr. Akhilesh Kumar Project Engineer Design Tech Pvt. Ltd. New Delhi. It was an interactive plus informative seminar on what are Data Analytics. The seminar focused on the real changes required to make your organization truly agile. And create a balanced ecosystem that combines new values, mindsets, processes and organizational design. The students gained knowledge about Data Analytics & Computer Vision for analyzing historical data in order to gain new insight and improve strategic decision –making.

## Learning Outcomes:

1. Able to use Matlab for interactive computations

2. Able to program scripts and functions using the Matlab development environment.

3. Students will develop the ability to build and assess data-based models.

# Report

**Name of the Department:** Computer Science

**Name of the Activity:** Picnic at Serene Aravali Resort, Pushkar.

**Date:**31st August 2019

**Total Number of the Students:** 67

**Venue:**Serene Aravali Resort, Pushkar, Ajmer.

**Report :** With their hearts filled with anticipation and bright smiles on their faces, the students and the faculty members of the BCA department headed off for their Picnic to "Serene Aravali Resort, Pushkar" for the students of the Computer Science Department, which was to be scheduled on 31st August 2019 at 8:00 am. After a warm welcome we assembled in the community hall for some interesting and interactive activities. The students were amazed beyond limit to see their mentors taking part in games and dancing their heart off. The students enjoyed the pool party, the chilled water and songs. It sparked an unfathomable satisfaction in the hearts of the students. The aesthetic beauty and peace of the place, instilled vigour and thrilled the students mind. The day ended with the laughter of the girls echoing in each and every corner and filled the air with joy and elation.

**Learning Outcomes:**

1. Gaining essential social skills.

2. Improving the Teamwork Skills.

3. Learn to manage stress through lifestyle factors.

## Eminent Speakers

**Mr. Tarkeshwar Shrimali**
Global Technical Architect,
zCloud Center of Competancy at
IBM, Coppel, Texas, US

**Prof. Ashok R. Patel**
Florida Polytechnic University,
Florida

**Mr. Hailay Beyene Berhe**
Aksum University, Ethopia

**Prof. Dr. G. R Kulkarni**
Shivaji University, Kolhapur

**Prof. Tapan Gandhi**
IIT Delhi , New Delhi

**Dr. Manas Patra**
Central University of Rajasthan
Bandar Seendri, Kishangarh

**Mr. Akhilesh Kumar**
DesignTech Systems Ltd.,
New Delhi

## Advisory Committee

- **Prof. Ashok R. Patel**
  Florida Polytechnic University, Florida
- **Prof. Dharm Singh Jat**
  University of Namibia, Namibia
- **Dr. Sanjeev Kumar Padmanaban**
  Aalborg University, Denmark
- **Prof. Lalit Kumar Awasthi**
  Dr. B. R. Ambedkar National
  Institute of Technology, Jalandhar
- **Prof. N. N. Jani**
  Kadi Sarva Vishwavidyalaya, Gujarat
- **Prof. Dr. G. R. Kulkarni**
  Shivaji University, Kolhapur
- **Prof. Priti Srinivas Sajja**
  Sardar Patel University, Gujarat
- **Prof. Atul Gonsai**
  Saurashtra University, Rajkot
- **Prof. Kumkum Garg**
  Bhartiya Skill Development University, Jaipur
- **Prof. C. P. Katti**
  Jawaharlal Nehru University, New Delhi
- **Dr. Bharat Singh Deora**
  Rajasthan Vidyapeeth, Udaipur

## Contact Details

Address :
Sophia Girls' College, Ajmer
(Autonomous)
Mirshali, Jaipur Road,
Ajmer 305001 (Rajasthan)

e-mail :
computerscience@sophiacollegeajmer.in

Website :
www.sophiacollegeajmer.in

## Two Day International Workshop

### on

### "Real Life Application of Machine Learning and Image Processing using MATLAB"

### December 17th & 18th, 2019

### Organised by

**DEPARTMENT OF COMPUTER SCIENCE,
SOPHIA GIRLS' COLLEGE, AJMER
(AUTONOMOUS)**

*Sponsored by*

**Department Of Science and Technology
Government of Rajasthan, Jaipur**

In collaboration with

**COMPUTER SOCIETY OF INDIA
UDAIPUR CHAPTER**

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## About Sophia Girls' College, Ajmer (Autonomous)

Sophia Girls' College, Ajmer (Autonomous) is an 'A' Grade Accredited Institute by NAAC (UGC) and is affiliated to Maharshi Dayanand Saraswati University. Since 1959 the College has held a high reputation nationally and internationally for imparting quality higher education through its dedicated and conscientious staff with high academic credentials and diversity of offered courses. At the Undergraduate Level, the College offers programs in B.A, B.Sc., B.Com, BBA, BCA, B.LIS, Honours in English, Economics, Commerce and Post Graduate Programs in English, Geography, Political Science, Sociology, History, Computer Science, Chemistry and ABST.

To inculcate scholarly excellence and make globally competent citizens, the Institution offers Generic, Skill Enhancement, Career Development and Foundation Courses for students. The Institution envisions building its reputation at par with international standards through its worldwide collaboration and linkages with Institutes of repute.

The College has an MHRD recognized Innovation Institution Cell. It offers Cambridge English Level Certification, Diploma in French from the French Embassy, Computer Certification Courses from IIT Mumbai; ISRO and DST Sponsored programs under its aegis. As an initiative towards Institutional, Social and Environmental Responsibility, the College has developed a 'Sustainable Environment by developing Biogas, Water Harvesting System and proudly boasts of being one of the fully solar electrified campus in Rajasthan. It also has a diversity of flora and fauna on the idyllic campus. As a Girls' College the Institution is in the forefront collaborating with NGOs, Women Development Corporation and the PUCL on gender sensitization, women empowerment and women entrepreneurship.

### Location

The College is located on Jaipur Road, Ajmer, Rajasthan at a distance of 1.5 Km from Ajmer bus stand and around 2.5 Km from Ajmer Railway station.

It is connected to Jaipur by road through AC bus service and Rail through Shatabadi/Superfast trains. The city is surrounded by the famous Aravali Hills. Ajmer is internationally famous for the Lord Brahma Temple at Pushkar and Dargah Sharif at Ajmer.

### About the Department

The Department of Computer Science was established in 2005 with Vocational Computer Applications and gradually grew by introducing Bachelor of Computer Application, Master of Computer Science in 2007 and Integrated MSc in 2019. The Department envisions building its reputation as one of the leading Under Graduate and Post Graduate Computer Science Departments in the nation in the areas of Computer Professionals, Web Developers and Software Engineers.

## About the Workshop

The Objective of the Workshop is to enable faculty, academicians, research scholars and students to understand the workspace and user interface. This workshop is designed to impart knowledge on machine learning, image processing, computer vision and deep learning in the context of data analysis along-with training in MATLAB. MATLAB is a high-performance language for technical computing. It integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation. It is an effective tool for data visualization and data exploration with an emphasis on understanding computational skills. MATLAB facilitates the processing of large and real data sets. MATLAB is widely available and many academic institutions use it for research as well as educational purposes. It is used as a teaching aid in Physics, Chemistry, Econometrics, Quantitative Finance, Risk Management, Psychology, Neuroscience and many more.

This workshop is designed to give the participants an overview of machine learning in image processing and computer vision by expert lectures and discussions. In addition, a major portion of the workshop involves explanations and hands on exercises in MATLAB.

## Registration Form

Name: Mr./Ms./Dr. ...........................................

(In Capital Letters)

Designation: ..................................................

Department: ..................................................

Organization: .................................................

Address for Correspondence: ............................

....................................................................

....................................................................

Mobile No.: ...................................................

E-mail ID: .....................................................

Educational Qualification: ...............................

Accommodation Required:              Yes/No

## Registration Fee

| | |
|---|---|
| Professionals/Academicians | 1500/- |
| Students | 750/- |
| Research Scholars | 1000/- |
| Accommodation Fee | 1200/- Per Person |

Registration fee includes workshop participation kit and lunch. All the members who desire to attend the workshop must send their registration fee through any of the following modes:

### 1). Demand Draft :

Drawn in favour of Sophia Girls' College, Ajmer payable at Ajmer. The registration fee should be sent by speed post/registered post to the following address : Principal, Sophia Girls' College, Mirshali, Jaipur Road, Ajmer 305001 (Rajasthan) .

### 2). Cash/Online :

Registration fee may be remitted by cash at College office or Online Payment may be made through the College website - www.sophiacollegeajmer.in

*(Kindly bring the receipt of your online payment)*
*Registration fee is non refundable*

**PATRON**
Dr. Sr. Pearl
(Principal)

**CONVENER**
Mr. Gautam Chaturvedi        9530259383
(Head, Department of Computer Science)

**ORGANISING SECRETARY**
Dr. Ritu Bhargava           9413994079

**ORGANISING COMMITTEE MEMBERS**
Mr. Jeetendra Mistry
Dr. Neha Sharma
Mrs. Kiran Bhagnani
Mr. Rishi Saxena
Mrs. Pooja Dixit

# Report

**Name of the Department:** Computer Science

**Name of the Activity:**Two Days International Workshop on 'Real Life Application of Machine Learning and Image Processing using MATLAB'.

**Date:**17$^{th}$ and 18$^{th}$ December 2019

**Total Number of the Students:** 152

**Venue:**Seminar Room& Computer Labs

**Resource Person:**
Mr. Tarkeshwar Shrimali( IBM technologies Florida ,USA) , Mr. Hailay Bayene Berhe(Aksum University,Ethiopia)

**Report:**The Department of Computer Science organized a Two Days International Workshop on 'Real Life Application of Machine Learning and Image Processing using MATLAB on 17$^{th}$ and 18$^{th}$ December 2019 at Sophia Girls' College, Ajmer, sponsored by the Department of Science & Technology, Government of Rajasthan, in collaboration with Computer Society of India, Udaipur Chapter. The workshop was inaugurated in a prayerful manner with the lighting of the lamp by our chief guest Smt. Meghna Choudhary (Chairwoman of Rajasthan Board of Secondary Education), and Keynote Speaker Mr. Tarkeshwar Shrimali( IBM technologies Florida ,USA), Resource Person Mr. Hailay Bayene Berhe (Aksum University, Ethiopia)our Principal Dr. Sister Pearl, Convener Mr. Gautam Chaturvedi and the Organizing Secretary Dr. Ritu Bhargava. The workshop enlightened the budding minds in the field of Machine Learning and Image Processing using MATLAB with their presentation on the use and importance of "Image Processing and Machine learning". The Workshop emphasized that the technological advancement is inevitable because it is the need of the time and has numerous advantages in our daily life along with the dark side of negative social impact which we have to manage at every level of our life

**Learning outcome:**

1. Recognize the characteristics of machine learning that make it useful to real-world problems.

2. Characterize machine learning algorithms as supervised, semi-supervised, and unsupervised.

3. Effectively use machine learning toolboxes

# DEPARTMENT OF COMPUTER SCIENCE
# SOPHIA GIRLS' COLLEGE
# (AUTONOMOUS), AJMER

## IS ORGANISING A

### ONE DAY SEMINAR ON

## "BUSINESS ANALYTICS AND ITS EVOLUTION"

**RESOURCE PERSON:** MR. KSHITIJ UPADHYAY(SENIOR FACULTY)
INTERNATIONAL SKILL DEVELOPMENT COOPERATION, NEW DELHI.

DATE: 16TH JANUARY, 2020

TIME: 11:30 AM

**VENUE: COLLEGE AUDITORIUM**

# Report

**Name of the Department :** Computer Science

**Name of the Activity :**One Day Seminar on **"Business Analytics and its Evolution"**.

**Date**:16$^{th}$ January 2020

**Total Number of the Students:** 80

**Venue:**College Auditorium, Sophia Girls' College (Autonomous), Ajmer

**Resource Person:** Mr. Kshitij Upadhyay, IOA New Delhi

**Report:** The Department of Computer Science organized One Day Seminar on "Business Analytics and its Evolution" on 16$^{th}$ January, 2020 at 11:30AM in the College Auditorium by Mr. Kshitij Upadhyay, IOA New Delhi. It was an interactive plus informative seminar on what are Business Analytics and its evolution. The seminar focused on the real changes required to make your organization truly agile. And create a balanced ecosystem that combines new values, mindsets, processes and organizational design. The students gained knowledge about statistical methods and technologies for analyzing historical data in order to gain new insight and improve strategic decision –making.

**Learning outcome:**

1. Understand and critically apply the concepts and methods of business analytics.

2. Create viable solutions to decision making problems.

3. Identify, model and solve decision problems in different settings

Phone : 0145-2427243

REF : SGCA/COMP.Sc./2019-20/293

Date: 03/01/2020

<u>**Letter of Invitation**</u>

To,
Mr. Kshitij Upadhyay,
Senior Faculty,
International Skill Development Cooperation,
New Delhi.

**Subject: Invitation – To be the Resource Person at the One Day Seminar on "Business**
**Analytics & its Evolution".**

Dear Sir,

It gives us immense pleasure to formally invite you to be the **Resource Person** in a one day
Seminar on **"Business Analytics & its Evolution"** being organized by the Department of
Computer Science for their Undergraduate & Postgraduate students on **16th January 2020** at
**11:30 am** in the College Auditorium.

It is our privilege to have you amongst us. Your deliberations will surely benefit the students.

Thanking you,

Yours Sincerely

(Gautam Chaturvedi)
**Head**
**Department of Computer Science**
**Sophia Girls' College**
**(Autonomous) , Ajmer**

(Dr. Sr. Pearl)
**PRINCIPAL**
**SOPHIA GIRLS' COLLEGE**
**(AUTONOMOUS)**
**AJMER**

# DEPARTMENT OF COMPUTER SCIENCE
# SOPHIA GIRLS' COLLEGE
# (AUTONOMOUS), AJMER

IS ORGANISING AN

# EDUCATIONAL TRIP

## INTERNATIONAL CONFERENCE AT MANIPAL UNIVERSITY, JAIPUR

5TH INTERNATIONAL CONFERENCE ON "ADVANCED MACHINE LEARNING TECHNOLOGIES AND APPLICATIONS" (AMLTA 2020)

**Date: 13th February, 2020**
**Time: 9:00 AM**

THE INTERESTED STUDENTS SHOULD SUBMIT THEIR NAMES TO MA'AM RITU BHARGAVA ON/BEFORE 06.02.2020

# Report

**Name of the Department :** Computer Science

**Name of the Activity :** Educational Trip to attend an International Conference

**Date:** 13th February, 2020

**Total Number of the Students:** 73

**Venue :** Manipal University, Jaipur

**Report :** The Department of Computer Science attended an International Conference at Manipal University, Jaipur on 13th February, 2020. It was the 5th International Conference on **"Advanced Machine Learning Technologies and Applications" (AMLTA 2020).**

**Learning outcomes:**

1. Great source to gain practical knowledge.

2. Students can observe and learn as to how theatrical concepts are put to into action, thereby aiding their practical learning

3. Students are exposed to real working environment and shown how things are done in an organization

# Report

**Name of the Department:** Computer Science

**Name of the Activity:** One Day Seminar on "Cyber Security and Cyber Crime Awareness"

 **Date**:15th February, 2020

**Total Number of the Students:** 83

**Venue:**College Auditorium, Sophia Girls' College (Autonomous), Ajmer

**Resource Person:** Dr. C.B Sharma retired IPS Govt. of India.

**Report:** The Department of Computer Science organized One Day Seminar on "Cyber Security and Cyber Crime Awareness" on 15[th]February, 2020 at 11:30AM in the College Auditorium by Dr. C.B Sharma retired IPS Govt. of India. It was an interactive plus informative. The seminar focused on Cyber Security and Cyber Crime. The students gained knowledge about cyber crimes, laws and its security, use and need of protection in today's world, how cautious do they need to be while being online.


**Learning outcomes:**

1. Design, develop, test and evaluate secure software.

2. Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure

3. Develop policies and procedures to manage enterprise security risks.

# DEPARTMENT OF COMPUTER SCIENCE
# SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER

**15 DAYS INTERNSHIP PROGRAM FROM 10TH TO 27TH FEBRUARY,2020 IN DOT SQUARES TECHNOLOGIES PVT. LTD.,AJMER**

# Report

**Name of the Department:** Computer Science

**Name of the Activity:**Internship Programat Dot Squares Technologies.

**Date:**10<sup>th</sup> to 27<sup>th</sup> February, 2020

**Total Number of the Students:** 11

**Venue :**Dot Squares Technologies Pvt. Ltd, Jaipur

**Report :**The Students of the Department Of Computer Science took part in the 15 Day "Internship Program" at "Dot Squares Technologies Pvt. Ltd, Jaipur" from 10<sup>th</sup> to 27<sup>th</sup> February, 2020 which was organised by  Dot Squares Technologies Pvt. Ltd, Jaipur. The company offered best of their services to the students. The internship was based on .net framework where students learned various designing and data connectivity languages such as HTML5, CSS3 etc. This internship proved to be beneficial and fruitful for the students. And the students used best of their skills for the same. It was indeed a great learning opportunity for them.After the completion of the program the students were given a certificate of completion.

**Learning Outcomes:**

1. Explore career alternatives prior to graduation.

2. Integrate theory and practice.

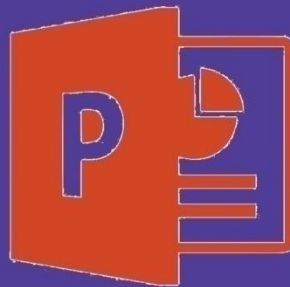3. Develop work habits and attitudes necessary for job success.

# Report

**Name of the Department :**Computer Science

**Name of the Activity :**PowerPoint Making Competition

**Date:**25<sup>th</sup> February, 2020

**Total Number of the Students:**30

**Venue :**MDS University Ajmer.

**Report :**The Final year students of the Department of Computer Science attended the inter collegiate Power Point Making Competition organized by MDS university, Ajmer. It was conducted on 25<sup>th</sup> February 2020, where each disciple got a separate topic to challenge their presentation skills and they were judged on the basis of originality and creativity, organization of content, oral presentation etc. The competition emphasized on promoting a fun way of enriching the learning process and fostering team building. And all the students participated enthusiastically along with competitive spirit. We also stood first and the winners were awarded with certificates and momentous.

**Learning Outcomes:**

1. Create and manipulate simple slide shows with outlines and notes.

2. Create slide presentations that include text, graphics, animation, and transitions.

3. Create a PowerPoint presentation.