### K.T.S.P.Mandal's

# Hutatma Rajguru Mahavidyalaya, Rajgurunagar

# Department Computer Science

# Annual Report 2023-24

During academic year 2023-24 Department of computer science organized different activities and events. The short report of all activities is as follows: -

Sr.No.	Activity/ Events name	Date
1	Welcome Function	11 August 2023
2	Training Program on Life skills	21 August 2023 to 25
	and employability skills	August 2023
3	Placement Drive	28 August 2023
4	Classroom Seminar For Students	12 September 2023
5	Coding battle Competition	25 September 2023
6	Group Discussion for Students	18 October 2023
7	Guest Lecture (Workshop	06 December 2023
8	Algorithm design challenge in	01 February 2024
	classroom	
9	Short Term Course	27 February 2024 to 06
		March 2024
10	Poster Presentation	18 April 2024
11	Project Exhibition	20 April 2024

#### 1. <u>Welcome Function: -</u>

During Academic Year 2023-24 department of Computer Science of Hutatma Rajguru Mahavidyalaya, Rajgurunagar organized "Welcome Function" for FYBSc (CS) students on Wednesday, 11 August 2023 at 10:00 am. This event was organized by SYBSc (CS) and TYBSc(CS) students. The function is conducted in Vitthalraoji ButtePatil Sabhagruha. The Chairperson for this event was Principal Dr. Shirish Pingale. Prof A.P.Kulkarni coordinates this program from computer science department. Students organized different activities for fresher's such as traditional dancing, mimicry and ring passing as well as musical chair etc. The objective of this function is to give a warm welcome to the fresher's; and to build confidence as well as add inspiration and creativity to their strengths.

#### 2. Training Program on Life skills and employability skills:-

Department of Computer Science organized a training program (from 21/08/2023 to 25/08/2023) on\_Life skills and employability skills in collaboration with Magic Bus India Pvt.Ltd. to groom the graduate and undergraduate student's .And after this training we assisted them with proper placement drive as per their skills and qualifications. The purpose of this program to helped the students for future placements. It gives the idea to the students that how to represents yourself at the time of interview, how to build your resume impressive, how to developed your personality.

#### 3. Placement Drive: -

K.T.S. P Mandals Hutatma Rajguru Mahavidyalay, Department of Computer Science organized a Placement Drive in collaboration with Magic Bus India Pvt.Ltd on 28/08/2023 for the students of different streams. The purpose of this program was helped these students to understand their career goals and defined them. Total 7 companies were participated in this drive and take interviews of around 200 students for different posts. Out of them 110 students selected in different companies at different positions as per their skills and ability.

#### 4. <u>Classroom Seminar For Students</u>: –

On 12/09/2023(Tuesday) department organized Classroom Seminar for F.Y.Bsc (Computer Science) students on below topics. The purpose of this seminar was to better understanding of various concepts of Mathematics such as Linear equation, Theorem of invertible Matrix, Equivalance relation, To find inverse using row reduction method, Converse, Inverse and Contrapositive statement, Row Echelon form, one-one fuction, LU Decomposition, Linear Combination, Linear System, Direct Method , Linear Transformation, RREF, Transpose of Matrix, Indirect Method, Symmetric and Skew Symmetric Matrix, Theory of Logic, Statement, Function, Truth Table. In terms of content, students will be able to show competence in identifying relevant information, defining and explaining topics under discussion. Students will develop persuasive speech, present information in a compelling, well-structured, and logical sequence, respond respectfully to opposing ideas, show depth of knowledge of complex subjects, and develop their ability to synthesize, evaluate and reflect on information. All Students of F.Y.Bsc (Computer Science) actively participated and enjoyed this activity.

#### 5. Coding battle Competition

On 25/09/2023(Monday) Prof.A.P.Kulkarni and Prof.S.A.Randive organized Code battle competition for F.Y.Bsc (Computer Science) students. This competition serves as an excellent platform for students to hone their coding skills. By tackling a diverse set of coding challenges, they not only improve their knowledge of programming languages and data structures but also enhance their problem-solving abilities.

In conclusion, the Code Battle Competition not only tests the mettle of our students but also equips them with invaluable skills and experiences that extend well beyond the competition. All Students of F.Y.Bsc (Computer Science) actively participated and enjoyed this activity. All staff members of Bsc.Computer Science Departments are successfully managed this Activity.

## 6. Group Discussion for Students :-

On 18/10/2023(Wednesday) Prof. A.P.Kulkarni and Y.J.Patangade organized Group discussion for S.Y.Bsc (Computer Science) students on below topics. It gives an opportunity to all members

to gives their ideas and opinion on certain topics. It increases ones listening skills and confidants in speaking. Topics of Group discussion was queue, Artificial Intelligent, stack, array, cloud computing, online or offline education, IoT, Robotics, Data structure application in daily life. etc. The purpose of group discussion is to evaluate certain attributes in the candidates that can be otherwise difficult or time consuming to a certain. Evaluators in the Group discussion will look out for communication skill, body language, knowledge and level of confidence. All Students of S.Y.Bsc (Computer Science) actively participated and enjoyed this activity .All staff members of Bsc.Computer Science Departments are successfully managed these Activity.

#### 7. <u>Guest Lecture (Workshop):-</u>

Workshop on "Microcontroller, Architecture, Interfacing and Programming" was successfully conducted by Department of Computer Science, Hutatma Rajguru Mahavidyalaya ,Rajgurunagar, Pune ,on 06 December 2023. The lecture was organized for S.Y.B.Sc. (Comp. Science) students and the contents covered were beneficial to students. In this session, resource person Prof. Avinash Shingate (Indira College of Commerce and Science, Wakad,Pune) started his discussion with basic concepts of Microcontroller, Architecture, pin diagram, interfacing of Microcontroller.

He covered all important topics from 8051 Microcontroller, Architecture, Interfacing and Programming". He talked about 8051 Architecture, Instruction types, Instruction set, ports, interfacing and programming.

#### 8. Algorithm design challenge in classroom:-

On 01/02/2024(Thursday) Prof.A.P.Kulkarni and Prof.Y.J.Patangade organized Algorithm design challenge in classroom for F.Y.Bsc (Computer Science) students.The algorithm design challenge in the classroom was a stimulating event where students put their problem solving skill to the test. Students were given various algorithmic problems to solve within a specified time frame. The challenge aimed to foster critical thinking, algorithmic reasoning and team work among the students. Highlights included students collaborating to devise efficient solution, employing algorithm such as sorting, searching, dynamic programming. The event provided valuable learning opportunities and encouraged healthy competition among students

overall it was a rewarding experience that showcased the students computational thinking abilities and their capacity to tackle complex problems.

### 9. Short Term Course:-

Department of Computer Science organized short term course of 30 hours on "Introduction to API using Android language" for S.Y.B.Sc. (Computer Science) and T.Y.B.Sc. (Computer Science) students from 27/02/2024 to 06/03/2024. The Principal Dr. S.S.Pingale inaugurated the function and delivered the speech and shared his optimistic views on the present's batch of students. Prof.A.P.Kulkarni Co-ordinate this whole program. The faculty members Prof. Y.J.Patangade, Prof. S.V.Patole, Prof. P.G.Darakhe ,Prof. M.R.Ugle of department guide the students how to install android studio, developed API and small android applications like Login screen, Calculator, Text editor etc. Total 55 students actively participated for this course and really enjoyed the program.

#### 10. Poster Presentation: -

Poster Competition was successfully conducted by Department of Computer Science, Hutatma Rajguru Mahavidyalaya, Rajgurunagar, pune on 18<sup>th</sup> April 2024.

Students of S.Y B.Sc. (Computer science) are actively participated in this poster competition. The competition is based on latest technology using IoT like, automatic irrigation, Smart bridge, Temperature measurement using DHT 22 and DS18B20, Solar tracking device, Water level indicator using Arduino, soil moisture measurement, wireless notice board, automatic washroom light indicator, distance measuring device, GPS tracking and color detector etc.

All faculty members of Computer Science department are helped to successfully manage this exhibition.

#### **<u>11. Project Exhibition:</u>**

On 20/04/2024(Saturday) Prof.A.P.Kulkarni organized Project Exhibition for S.Y.Bsc (Computer Science) students. The project exhibition featured innovative IoT project developed by S.Y.Bsc (Computer Science) students. Highlights included project ranging from smart home automation system to environmental monitoring solutions. Students demonstrated their creativity and technical skill in harnessing IoT technology to solve real world problem. Our

college principal Dr. S.S.Pingale visit the exhibition and impressed by practical application and potential impact of these project overall it was a successful showcase of the students ingenuity and dedication to advancing technology.

Prof.A.P.Kulkarni HOD-Computer Science