

#### DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING.

## **Report on AVISHKAR-22 - Research Project Competition**

| Sr.<br>No |  |  |  |  |  |
|-----------|--|--|--|--|--|
| 1)        | Name of Event  | <b>Research Project Competition</b>  |  |  |  |
| 2)        | Institute name   | RMD Sinhgad School of Engineering  |  |  |  |
| 3)        | Date, time and<br>Venue of Event   | 15 <sup>th</sup> Sept 2022,  |  |  |  |
| 4)        | Participants   | All final year students of RMD Sinhgad School of Engineering, faculties.                     |  |  |  |
| 5)        | Purpose  | To enhance innovative ideas and research skills amongst students and faculties as well.      |  |  |  |
| 6)        | Teacher     Dr. Pratibha M. Alandkar.       Coordinator     Image: Coordinator |  |  |  |  |
| 7)        | Student co-<br>ordinator   | <ol> <li>Shivani B. Bhikule (BE E&amp;Tc)</li> <li>Sushil Vedpathak (BE E&amp;Tc)</li> </ol> |  |  |  |



#### Sinhgad Technical Education Society **RMD SINHGAD TECHNICAL INSTITUTES CAMPUS** (Approved by AICTE & Affiliated to Savitribai Phule Pune University, Pune)

Off.: S. No. 111/1, Warje, Pune-Mumbai Bypass Highway, Pune – 411 058. Phone: 020-29996622/33 E-mail: principal.rmdssoe@sinhgad.edu Website: http://rmdstic.sinhgad.edu

#### **Detailed Report:**

**AVISHKAR -2022**, a research project competition, initiated by Savitribai Phule Pune University, Pune, organized in RMD Sinhgad School of Engineering, Warje, Pune on 15<sup>th</sup> September 2022 as per the revised guidelines received from SPPU, Pune, Ref. No. : IQAC/69 dated 08/09/2022. Inauguration of the event was done by Principal/ Director Dr. V. V. Dixit. Following his speech, all HODs along with Principal sir has evaluated all the ideas. According to innovativeness, social usefulness, the ideas were evaluated. Total number of groups participated were UG Level: 27, PG Level: 01 and Teachers Level: 01. For UG level each group had three students.

Two groups from each department were selected and awarded prize. Winning teams are promoted to appear for next level of competition.

#### **Photographs:**





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#### **CONCLUSION:**

The event was coordinated very nicely and smoothly. Everyone was motivated to do better. In a way AVISHKAR-22 was a great success.

Dr. Pratibha M. Alandkar ARC, RMDSSOE, Warje, Pune - 58

Dr. V. V. Dixit Principal / Director, RMD STIC, Warje, Pune – 58



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List of Participants

|     | Level: UG             |                |   |                               |  |  |  |
|-----|-----------------------|----------------|---|-------------------------------|--|--|--|
| Sr. | Name of the           | Name of the    | Name of the Project   | Area of Research              |  |  |  |
| No. | Participant<br>Pranit | Department     |   |                               |  |  |  |
|     | Wankhede              |                |   |                               |  |  |  |
|     | Srushti Dandle        |                | Persona Prediction via CV/Resume                              | Machine learning              |  |  |  |
| 1   | Vipul Nikam           | IT Engineering | Analysis  |                               |  |  |  |
|     | Gayatri               |                | 7.11019515  |                               |  |  |  |
|     | Darshane              |                |   |                               |  |  |  |
|     | Arbaz Attar           |                |   |                               |  |  |  |
|     | Shubham               |                |   |                               |  |  |  |
| 2   | Narale                | IT Engineering | Investment Portfolio managment                                | Machine learning              |  |  |  |
| -   | Piyush Kulkarni       |                | system using machine learnig                                  |                               |  |  |  |
|     | Pranay Mule           |                |   |                               |  |  |  |
|     | Rohit Thomare         |                |   |                               |  |  |  |
|     | Suyog Patil           |                | Start in to start up  |                               |  |  |  |
| 3   | Abhishek              | IT Engineering |   | Blockchain                    |  |  |  |
| -   | Khairnar              | 0 0            |   |                               |  |  |  |
|     | Pankaj Patel          |                |   |                               |  |  |  |
|     | Vishakha              |                | Teacher Management System                                     | Engineering and<br>Technology |  |  |  |
|     | Sisodiya              |                |   |                               |  |  |  |
| 4   | Sanika Jagtap         | IT Engineering |   |                               |  |  |  |
|     | Srushti Sonar         |                |   |                               |  |  |  |
|     | Anurag Jagtap         |                |   |                               |  |  |  |
|     | Pratik Bhor           |                | Message lock searchable<br>encryption                         | Cloud,AI                      |  |  |  |
| _   | Priti Ughale          |                |   |                               |  |  |  |
| 5   | Sakshi Bhongal        | IT Engineering |   |                               |  |  |  |
|     | Anish Karkhanis       |                |   |                               |  |  |  |
|     | Mansur Khan           |                |   |                               |  |  |  |
|     | Pallavi Ghodake       |                |   |                               |  |  |  |
| 6   | Silky Kedar           | IT Engineering | Smart Connect   | Engineering and               |  |  |  |
|     | Snehal                |                |   | Technology                    |  |  |  |
|     | Kadganchi             |                |   |                               |  |  |  |
|     | Sukanya Patil         |                |   |                               |  |  |  |
|     | Prajakta Boin         | E&TC           | Automatic Railway Gate Opening<br>and Unmanned Level Crossing |                               |  |  |  |
| 7   | Gayatri Mete          | Engineering    |   |                               |  |  |  |
|     | Sushil                | LIGHTCCHING    |   | Image Processing 8            |  |  |  |
|     | Vedpathak             |                |   | Raspberry Pi                  |  |  |  |



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|    | 1   |                      |   |  |
|----|---|----------------------|---|--|
| 8  | Deep Thakare<br>Rushi<br>Nagargoje<br>Aditya Bhosale                                  | E&TC<br>Engineering  | Social Distancing system<br>using Ultrasonic Sensor                                 | Ultrasonic<br>frequency<br>measurement |
| 9  | Saniya Upendra<br>Bhargav Potdar<br>Ankur Raj   | E&TC<br>Engineering  | Anomaly Detection in Videos<br>using Machine Learning                               | Machine Learning                       |
| 10 | Abhishek Bora<br>Utkarsha<br>Sonawane<br>Akash Bhosale                                | E&TC<br>Engineering  | Plant Leaf Disease Detection<br>using AI for Precision Agriculture                  | Artificial Intelligence                |
| 11 | Sharangdhar<br>Pawar<br>Pranav<br>Kondhekar<br>Viraj Hulawale                         | E&TC<br>Engineering  | Portable Ventilator   | Biomedical                             |
| 12 | Aachal Khadke<br>Swapnali Mali<br>Apurva<br>Dhaigave                                  | E&TC<br>Engineering  | Students Biometric<br>Attendance System   | Image Processing                       |
| 13 | Prasad Mete<br>Shalu Pandey<br>Dhanashree<br>Suryawanshi                              | E&TC<br>Engineering  | Electric Vehicle Battery Charging<br>Station using IoT                              | Internet of Things                     |
| 14 | Devesh<br>Gahulekar<br>Tejas Patil<br>Vivek Badgujar                                  | E&TC<br>Engineering  | Land Area Calculating<br>Unmanned Arial Vehicle                                     | Image Processing                       |
| 15 | Rushikesh<br>Khirsagar<br>Lokesh Pawar<br>Komal Gawari<br>Sagar More                  | CIVIL<br>Engineering | To Study Effect of Replacement of<br>Sand In Concrete By Industrial Slag<br>(BFS)   | Concrete<br>Technology                 |
| 16 | Altaf Patel<br>Vishnu Jadhav<br>Aashwini Mule<br>Nikhil Rathod<br>Pradeep<br>Mundhkar | CIVIL<br>Engineering | To Study of Concrete Using GGBS<br>and Lithium Salt                                 | Concrete<br>Technology                 |
| 17 | Kale Shreyas<br>Nishant Patil<br>Shubham  | CIVIL<br>Engineering | Experimental Study on Small Size<br>RC Circular Column Confined With<br>CFRP Strips | Structural<br>Engineering              |



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|    | Mahale                 |                         |   |   |
|----|------------------------|-------------------------|---|---|
|    | Himanshu               |                         |   |   |
|    | Deore                  |                         |   |   |
|    | Piyush                 | CIVIL                   | Litiliation of Silica fume to improve                                     | Concrete                                |
|    | Nagapure               | Engineering             | Utiliation of Silica fume to improve performance of concrete              | Technology                              |
|    | Tejas Salunkhe         | Linginieering           | performance of concrete   | rechnology                              |
| 18 | Shubham                |                         |   |   |
|    | Todkar                 | Computer                | Model for Image Denoising and   | Image Processing                        |
|    | Vaishnavi Ugale        | Computer<br>Engineering | Generating Clear image with Rest  |   |
|    | Siddhika Patil         | Linginieering           | ASPI and GUI Applications   |   |
|    | Viraj Sure             |                         |   |   |
| 19 | Kishan Tiwari          |                         |   |   |
| 19 | Akshay Gupta           | Computer                | Fack Product Detection Using  | Blockchain                              |
|    | Nikita Patil           | Engineering.            | Blockchain Technology   | Technology                              |
|    | Akash Sabale           |                         |   |   |
|    | Aryaman                |                         |   | Machine Learning &<br>Image Processing  |
|    | Nasare                 |                         |   |   |
| 20 | Anushka Joshi          | Computer                | Handwritten Script Character<br>Extraction From Physical<br>Documentation |   |
|    | Shravani               | Engineering.            |   |   |
|    | Chandratre             |                         |   |   |
|    | Aditya Sanap           |                         |   |   |
|    | Patil Vaishnavi        |                         |   | Machine Learning &<br>Image Processing  |
|    | Sanjeev                |                         | Road Object Detection System  |   |
|    | Shende                 | Computer                |   |   |
|    | Krutadnya              |                         |   |   |
| 21 | Suresh                 | Engineering.            |   |   |
|    | Ravi tulashidas        | 5 5                     |   |   |
|    | gavhane                |                         |   |   |
|    | Raj ramnaresh<br>kewat |                         |   |   |
|    | Kate Kadambari         |                         |   |   |
|    | Sheth Kevin            |                         |   | Machine Learning &<br>Augmented Reality |
| 22 | Jayesh                 | Computer                | KidZee Using Augmented Reality  |   |
| 22 | Gaur Ajay              | Engineering.            | Ridzee Using Augmented Reality  |   |
|    | Paliwal Yash           |                         |   |   |
| 23 | Ajinkya kotwal         |                         | Ensuring IoT data integrity using block chain                             | Blockchain<br>Technology                |
|    | Omkar Satpute          |                         |   |   |
|    | Prem                   | Computer                |   |   |
|    | Khandelwal             | Engineering.            |   |   |
|    | Rishikesh              |                         |   |   |
|    | Mahajan                |                         |   |   |



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Sayali Pawar Sakshi Kumbhar Computer Contactless Fingerprint Verification Machine Learning & 24 Image Processing Engineering System Aishwariya Nair Mayuri Zade Piyusha Patil Parth Computer Aid, Charity and Donation tracking Blockchain 25 Mangalkar system using Blockchain Engineering. Technology Manjusha Katkhede Mayur Pansare Atharva Raskar Computer Decentralize Voting System Using Blockchain 26 Tushar Kamble Engineering. Blockchain Technology Vishal Chumbalkar Rohan Sanjay Desale Mechanical 27 Fluid flow concept Vortex Induced Vibrations Shantanu Engineering. Raghunath kale

#### Level: PG

| Sr.<br>No. | Name of the<br>Participant | Name of the<br>Department | Name of the Project | Area of Research               |
|------------|----------------------------|---------------------------|---------------------|--------------------------------|
| 1          | Ravina Ashok<br>Yadav      | Civil                     |                     | Construction and<br>Management |

#### Level: Teachers

| Sr. | Name of the | Name of the | Nome of the Droiget           | Area of Decearch |
|-----|-------------|-------------|-------------------------------|------------------|
| No. | Participant | Department  | Name of the Project           | Area of Research |
| 1   | Mr Abhijeet | Civil       | Techno Economic Comparison Of | Waste Water      |
|     | Datye       | CIVII       | Mechanized Waste Water System | Management       |



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# **List of Winning Participants**

|            | Level: UG   |  |                           |  |                                       |  |  |
|------------|-------------|--|---------------------------|--|---------------------------------------|--|--|
| Sr.<br>No. | Group<br>No | Name of the<br>Participant   | Name of the<br>Department | Name of the Project  | Area of<br>Research                   |  |  |
|            |             | Arbaz Attar  |                           | lucio atua ant Dantfalia   | Machine<br>learning                   |  |  |
| 1          | 3           | Shubham Narale   |                           | Investment Portfolio   |                                       |  |  |
| т          | 5           | Piyush Kulkarni  | IT Engineering            | managment system<br>using machine learnig                                    |                                       |  |  |
|            |             | Pranay Mule  |                           |  |                                       |  |  |
|            |             | Rohit Thomare  |                           |  |                                       |  |  |
| 2          | 5           | Suyog Patil  | IT Engineering            | Start in to start up   | Blockchain                            |  |  |
| Z          | 5           | Abhishek Khairnar  |                           | Start in to start up   | DIOCKCITAIII                          |  |  |
|            |             | Pankaj Patel   |                           |  |                                       |  |  |
| 3          | 1           | Sukanya Patil<br>Prajakta Boin<br>Gayatri Mete<br>Sushil Vedpathak | E&TC<br>Engineering       | Automatic Railway Gate<br>Opening and Unmanned<br>Level Crossing             | Image<br>Processing &<br>Raspberry Pi |  |  |
| 4          | 4           | Sharangdhar Pawar<br>Pranav Kondhekar<br>Viraj Hulawale            | E&TC<br>Engineering       | Portable Ventilator  | Biomedical                            |  |  |
|            | 8           | Rushikesh Khirsagar  | CIVIL<br>Engineering      |  |                                       |  |  |
| 5          |             | Lokesh Pawar   |                           |  | Concrete                              |  |  |
| 5          |             | Komal Gawari   |                           |  | Technology                            |  |  |
|            |             | Sagar More   |                           |  |                                       |  |  |
|            | 11          | Kale Shreyas   | -                         | Experimental Study on<br>Small Size RC Circular<br>Column Confined With      |                                       |  |  |
| 6          |             | Nishant Patil  | CIVIL                     |  | Structural<br>Engineering             |  |  |
| U          |             | Shubham Mahale   | Engineering               |  |                                       |  |  |
|            |             | Himanshu Deore   |                           | CFRP Strips  |                                       |  |  |
|            | 1           | Aditya Sanap   | _                         | Handwritten Script<br>Character Extraction<br>From Physical<br>Documentation | Machine                               |  |  |
| 7          |             | Anushka Joshi  | Computer                  |  | Learning &                            |  |  |
| ,          | -           | Aryman Nasare  | Engineering.              |  | Image                                 |  |  |
|            |             | Shravani Chandratre  |                           |  | Processing                            |  |  |
|            |             | Kishan Tiwari  |                           | Fake Product Detection<br>Using Blockchain                                   | Machine                               |  |  |
| 8          | 8           | Akshay Gupta   | Computer                  |  | Learning &                            |  |  |
| 5          |             | Nikita Patil   | Engineering.              |  | Image                                 |  |  |
|            |             | Akash sabale   |                           |  | Processing                            |  |  |
|            |             | Rohan Sanjay Desale  | Mechanical                | Vortex Induced   | Fluid flow                            |  |  |
| 9          | 1           | Shantanu Raghunath   | Engineering.              | Vibrations   | concept                               |  |  |
|            |             | kale   |                           |  |                                       |  |  |



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#### Level: PG Name of the Name of the Area of Sr. Name of the Project Participant Department Research No. An Experiemntal Study on Strength Construction Characterisitcs of Pervious Concrete By Ravina Ashok Civil and 1 **Executing Partial Addition of Glass Fibre** Yadav Engineering Management and Polypropelene Fibre

#### Level: Teachers

| Sr.<br>No. | Name of the<br>Participant | Name of the<br>Department | Name of the Project  | Area of Research |
|------------|----------------------------|---------------------------|--|------------------|
| 1          | Mr Abhijeet<br>Datye       | Civil                     | Techno Economic Comparison Of<br>Mechanized Waste Water System |                  |