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K. E. Society's
**Rajarambapu Institute of Technology, Rajaramnagar**
(An Autonomous Institute, affiliated to SUK)

# Report on <u>"Kalyani RIT Quantum – 2023"</u>
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We have organizing the "Kalyani-RIT-Hackathon-2k23" National Technical Symposium in association with Bharat Forge from last Fourteen years. This event provides a platform for students to address societal and industrial issues. The association of Bharat Forge with the RIT-Hackathon-2k23 event has given the event a new depth and a distinct image, and each year the student response to these activities is increasing.

This year, we have arranged one events RIT Hackathon 2023. On June 16 and 17, 2023, a national-level event titled "RIT-HACKATHON-2K23" has been organized in the first event category.

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## I. RIT HACKATHON - 2K23
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Rajarambapu Institute of Technology (An Autonomous Institute affiliated to SUK), Rajaramnagar in association with Bharat Forge Pvt. Ltd., Pune had organized RIT HACKATHON-2K23, a national level event of 24 hours coding on 16th and 17th June 2023.

This event is the platform for the students to explore the creative and entrepreneurial spirit amongst one and all. The RIT-Hackathon 2023 was planned with five tracks in two phases, Electrical Energy System, Embedded Systems & IoT, Applications of AI & ML, Mechanical & Mechatronics Systems, and Robotics & Innovation. The first phase consists of submitting the innovative solutions for the problems selected for RIT-Hackathon. For the second phase, ideas were shortlisted and participants invited for 24 hours competition.

For RIT-Hackathon 2K23, we have received a very good response to the event. The 110+ groups were registered for Phase –I of hackathon and after Phase-I result 80+ groups were participated in a 24 hours final round. The prizes worth Rs. 1.0 lakhs were awarded to winners.

The student community is an integral part of undertaking development projects owing to their innovative and enthusiastic approach to a problem. To harness their talent, RIT-Hackathon 2023 is a national-level event that provides the opportunity to work on real-time problems faced by society and industry. Being a national platform, this event provides a runway to innovative ideas from where they can take off and soar high. The idea behind the 24 hours Hackathon was to attract talented brains to identify innovative solutions for Society and Industry related problems.

The event was inaugurated on 16th June 2023 by Shri Santosh Joshi ((Research Specialist, Florida International University)) was present as the Chief Guest for the Inaugural Function, Honourable Shri R.D Sawant (Secretary, Kasegaon Education Society, Sakharale) and Honourable Shri. Shamrao Patil(Anna) (Chairman, Rajarambapu Co-op Bank Ltd., and Member BOG, RIT) was present as a Guest of Honour. Incharge Director Dr. H.S Jadhav addressed the gathering with his inspirational speech. Dr. N.V. Dharwadkar (HOD CSE) addressed the gathering and briefed about the journey of the RIT-Hackathon. The layout of the event was given by Mr. Taranpreet Singh, (Coordinator RIT-HACKATHON 2K23). Dr. Santosh Joshi

addressed gathering with his inspirational speech and addressed about Post-graduate, research opportunities in abroad. All Deans, HoDs, faculty members and, participants were present for the function. Finally, Prof. V.M Mokashi (Assistant Professor, CSE Dept.) has expressed the vote of thanks.

Valedictory Function was held on 17th June 2023. Dr. Santosh Honnagunti (Chief Operating Officer, Hansen Technologies, India), were Chief Guest of Valedictory Function. Dr. Santosh Honnagunti addressed the students about opportunities, said inspirational words and shared his experiences. Mr. Taranpreet Singh and Mr. V.M Mokashi (Event Coordinator), Dr. N. V. Dharwadkar (HoD CSE), Dr. L. M. Jugulkar (Dean Student Development), & all faculty members were present for the Prize distribution ceremony. Finally, the vote of thanks was given by Prof. V.M Moakshi.

Total Cash Prizes worth Rs. 57,000/- were given among five tracks in two phases, Electrical Energy System, Embedded Systems & IoT, Applications of AI & ML, Mechanical & Mechatronics Systems, and Robotics & Innovation.

**Table: DETAILS OF PARTICIPANTS**

| Event Phases | Total number of Groups Registered | Total number of Students Participated |
|---|---|---|
| Phase I | 116 | 345 |
| Phase II | 82 | 246 |

**Table: NAME OF THE TRACKS**

| | |
|---|---|
| 1. Electrical Energy System | 2. Embedded Systems and IoT |
| 3. Applications of AI & ML | 4. Mechanical & Mechatronics Systems |
| 5. Robotics & Innovation | |

**Table: CHIEF GUESTS**

| RIT Hackathon 2020 Function | Chief Guest | Guest Introduction |
|---|---|---|
| *Inaugural Function* | **Dr. Santosh Joshi** Research Specialist II Florida International University, Miami, Florida | Over 17 years of professional experience in Academia and IT Industry as a Research Specialist II with expertise in Applied Research in the area of Cyber Security, Artificial Intelligence, Big Data, Software Engineering, Software Architecture and Database Design. Extensive experience in the development, implementation and integration strategies towards a team-oriented environment, utilizing quantitative and qualitative analytical skills, with ease in communicating /converting client's |

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|---|---|---|
| | | vague/non-technical requirements into precise/concise representation to the team. |
| *Valedictory Function* | **Dr. Santosh Honnagunti, Chief Operating Officer, Hansen Pvt. Ltd., Bengaluru.** | He completed Doctorate in Telecom & Management, has 20+ years of experience in Telecom Protocol Stack Development, Telecom OSS & BSS, Utilities & Smart Cities. Worked for telecoms in Europe, Middle East, APAC, South Africa and US. He has been working in the following areas of Product development, and Project management for GSM/GPRS/PSTN/Satellite/CableMSO/ ADSL/ GPON/ Broadband. |

**Table: List of Internal and External Evaluators:**

| Evaluators | Name of the Person | Designation and Name of Organization |
|---|---|---|
| **External Evaluators** | Dr.Narayan D.G. | Professor, KLE University, Hubali |
| | Dr. M.U. Nagaral | Professor, B.L.D.E college of Engineering, Bijapur |
| | Mr. Dnyanesh Deshpande | Product Delivery Manager Mastercard, Pune |
| | Amir Pathan | Manager, Shetkari Winkari sahakari Sutgirni islampur |
| | Rushikesh Pathak | Senior Consultant, NetApp data storage USA |
| **Internal Evaluators** | Dr. N.V.Dharwadkar | HOD, Department of Computer Science & Engineering, RIT |
| | Prof. Vijay Kalmani | Associate Professor, Department of Information Technology , RIT |
| | Prof. R A Metri | Assistant Prof Electrical Engineering Department |
| | Prof.R.T.Patil | Associate Professor, Department of Electronic & Telecommunication , RIT |
| | Prof. U.A. Kamerikar | Assistant Professor, Department of Electronic & Telecommunication , RIT |
| | Prof. R.M Shinde | Associate Professor, Department of Mechanical Engineering , RIT |

**Table: List of Track-wise Winners**

| Track | Prize | Project Title | Name of Participants | Name of Institute |
|---|---|---|---|---|
| Applications of AI & ML, | 1st Prize of Rs.8000/- | First Prize-AIML-23 : Real time inspection of fabric defects in the textile industry | Esha Amit Arora, Abhishek Sakhave, Aishwarya Naik | DKTE, Ichalkarnji |
| | 2nd Prize of Rs.2750/- | Second Prize :AIML-56 Bus Entry scanning and record keeping application using python CV2 and machine learning | Anshul Bhimnath, Sanket Bodhale, Sejal Patil,Chinmai Arekar | Rajarambapu Institute of Technology, Rajaramnagar |

| | 2nd Prize of Rs.2750/- | Second Prize :AIML-51 Automated Attendance system | Shubham Halade & Sanket Nikam | Rajarambapu Institute of Technology, Rajaramnagar |
|---|---|---|---|---|
| | 3rd Prize of Rs.1750/- | Third Prize:AIML-10 Generation of Images from text using 2 stage GANs or Diffusion Models | Vikram Velankar & Neha Basugude | Rajarambapu Institute of Technology, Rajaramnagar |
| | 3rd Prize of Rs.1750/- | Third Prize:AIML-04 Sign Language Detection | Divya Dattatray Mane, Shraddha Giri | Rajarambapu Institute of Technology, Rajaramnagar |
| Embedded Systems & IoT | 1st Prize of Rs.8000/- | First Prize :EMBIOT - 19: Driver Drowsiness Detection | Mustafa Mansur Masuldar | N. B. Navale Sinhgad College of Engineering, Solapur |
| | 2nd Prize of Rs.2750/- | Second Prize:EMBIOT - 40: Hexapod robot (for spying) | Dhwij Makarand Patil | Rajarambapu Institute of Technology, Rajaramnagar |
| | 2nd Prize of Rs.2750/- | Second Prize:EMBIOT – 11 Smart Medicine Box. | Aniket Vilas Patil | PVPIT,Budhgaon |
| | 3rd Prize of Rs.3500/- | Third Prize:EMBIOT - 4: Intelligent Traffic rule violation detection and enforcement system | Ashish Maruti Chougule | Sharad institute of technology,yadrav |
| Electrical Energy System | 1st Prize of Rs.8000/- | First Prize-EES_04 QR based EV charging station | Harish Londhe | Rajarambapu Institute of Technology, Rajaramnagar |
| | 2nd Prize of Rs.5500/- | Second Prize : EES_08 Solar Tracking without Power | Shradddha Bharat Patil . | DKTE, Ichalkarnji |
| | 3rd Prize of Rs.3500/- | Third Prize: EES_09 Solar Panel Cleaning Robot | Salmankhan Jamsherkhan Pathan | PVPIT,Budhgaon |
| Mechanical & Mechatronics Systems | 2nd Prize of Rs.5500/- | Second Prize MECH-02 Efficient smart Braces for life threatening disease Paraplegia. | Shravani Muttur | Sharad institute of techonology college of engineering, yadra, ichalkaranji |

The glimpses of events are attached herewith.



Inaugural Function: Dr. Santosh Joshi, Hon. Shri. Shamrao Patil, Hon. Shri R.D. Sawant, Dr. H.S.Jadhav.



Inaugural Function: Felicitation of Guest of Honor: Shri. R.D. Sawant by Dr.H. S. Jadhav.



Inaugural Function: Felicitation of Chief Guest: Dr. Santosh Joshi by Hon. Shri R.D Sawant Sir.



Inaugural Function: Felicitation of Guest of Honor: Shri. Shamrao Patil (Anna) by Dr. L. M. Jugulkar



Inaugural Function: Felicitation of RIT-Director by Dr. N.V.Dharawadkar



Dr. N.V. Dharwadkar (HOD CSE) addressing the gathering and briefed about the journey of the RIT-

Inaugural Function: Director Dr. H.S.Jadhav addressing the gathering.



Inaugural Function: Chief Guest, all dignitaries, Faculty members and articipants in Inaugural Function of RIT ACKATHON - 2K23.



The layout of the event was given by R.Taranpreet Singh, (Coordinator RIT-HACKATHON 2K23).



Chief Guest Dr. Santosh Joshi addressing the gathering.



External Evaluator Evaluate the students of various track in RIT-Hackathon 2K23.



External Evaluator Evaluate the students of various track in RIT-Hackathon 2K23.

Valedictory Function and Prize Distribution: Chief Guest, all dignitaries, Faculty members and Participants in Valedictory Function of RIT HACKATHON - 2K23.



Valedictory Function and Prize Distribution: Chief Guest Mr. Santosh Honguntti addressing the gathering tracks.



Valedictory Function: Felicitation of Chief Guest: Dr. Santosh Honguntti by Director Dr. H. S. Jadhav



Prize Distribution



Prize Distribution



Prize Distribution

Prize Distribution



Prize Distribution

Mr.Taranpreet Singh & Vinmay Mokashi         Dr. N.V. Dharwadkar              Dr. H.S. Jadhav
Event Coordinator                              HoD, CSE                        I/c Director,
RIT