

## EVENT REPORT

### **NASA SPACE APPS CHALLENGE (Pre-Qualifier Round)**

#### **CONCEPT:**

The International Space Apps Challenge is an international mass collaboration focused on space exploration that takes place in different cities around the world. The event embraces collaborative problem solving with a goal of producing relevant open-source solutions to address global needs applicable to both life on Earth and life in Space. NASA is leading this global collaboration along with a number of government collaborators and over 100 local organizing teams across the globe.

**DATE:** 10<sup>th</sup> and 11<sup>th</sup> March 2018

**DURATION:** 24 hours

**LOCATION:** Institute of Aeronautical Engineering, Dundigal, Hyderabad , India.

#### **ORGANIZERS:**

##### **Team Leads:**

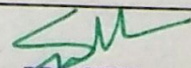
- Rohith Mothe
- Sushmitha Hari Priya Varanasi
- Gajanan Lakshmi Priyanka

##### **Organizing Team:**

- |                        |                     |
|------------------------|---------------------|
| • G. Sai Ruchith Reddy | • Sai Krishna Mohan |
| • B. Raj kiran         | • Sri Nandan        |
| • K. Preetham Sai      | • Sneha Panda       |
| • Harshavardhan        | • Usha Manjari      |
| • S.V.S Aditya         | • Kalyan            |
| • Srujana              | • Santosh Cherkula  |
| • Komal Naidu          |                     |

**Number of Volunteers:** 60



  
PRINCIPAL  
INSTITUTE OF AERONAUTICAL ENGINEERING  
Dundigal, Hyderabad - 500 043  
Telangana State



**GOALS:**

- To bring forth innovative ideas and solutions to the problem statements provided by Space Apps Team.
- To encourage students to know about hackathon culture and how to solve real time issues or problems using NASA open data
- To form Space Apps Student Community in tier 2 and tier 3 colleges
- People selected in Pre Qualification will be sent to local level of hackathon where they will be competing with different zonal winners.

**BOOTCAMPS CONDUCTED:****❑ Institute of Aeronautical Engineering:**

**Date:** 14th and 17th of February 2018.

**Guests:** Sai Kiran Katapally (Founder of SUMVN),  
Narendra Krishna (CEO of SUMVN) and SUMVN team

**No of students attended:** 1265

The boot camps for pre-qualifier round of hackathon were conducted by the IARE organizing team where our guest Mr. Sai kiran and Mr. Narendra Krishna who are local lead of Space Apps Hyderabad, introduced our students about the event and its importance. We gave a presentation on how the event was conducted back in 2016 and 2017. We talked about how the pre-qualifier event would be conducted in the college including the procedure to register, innovate and a few tips on how to pitch an idea and also about the impact it would create on their career. We talked about our plans to start a Space Apps Community to help students interact with each other and build up their projects for the next year's challenges. It would be a technical community which would ensure to teach students new skills and encourage them to work on their projects and ideas. We introduced the challenges of previous year on which the students need to on work and gave them a detailed information about what the themes dealt with. The students were also made to join the interactive session where they had the opportunity to have a clear picture about the event.



**❑ Hyderabad Institute of Technology and Management:**

**Date:** 02nd March 2018.

**No of students attended:** 500

This bootcamp was conducted by the IARE Lead Organizers for the students of HITAM. We've had a good interactive session and received a good support from the "hackathon club" of the college. A few participants who participated in the NASA hackathon previously also showed an interest in talking to the students about the event and its importance. We talked about our plans to make a community which would not only bring together students to work on challenges of previous year but also give them an opportunity to build their own ideas by learning new skills and technologies. Students were made aware about the previous year's challenges and that they would be participating on those challenges for the pre-qualifier round in IARE college.

**ABOUT THE EVENT**

**PREVIOUS YEAR CHALLENGES ON WHICH THE STUDENTS WORKED ON:**

- Our Ecological Neighbourhood
- Ideate and Create
- Warning! Danger Ahead
- The Earth and us
- Planetary Blues

**COLLEGES PARTICIPATED:**

- Institute of Aeronautical Engineering
- Marri Laxman Reddy Institute of Technology
- Marri Laxman Reddy Institute of Technology and Management
- Hyderabad Institute of Technology and Management
- St. Martin's Engineering College
- CMR college of Engineering and Technology
- CMR Institute of Technology
- Mahatma Gandhi Institute of Technology
- Malla Reddy Engineering College

**NO OF PARTICIPANTS ATTENDED:** 264



**NO OF TEAMS REGISTERED: 84**

**AGENDA OF THE EVENT:**

**Day 1:**

S.No	SESSION	TIME	VENUE
1.	Registrations	9:30 to 11:00	Volleyball ground
2.	Inauguration by guests	11:00 to 11:15	Auditorium Hall
3.	Introduction to NASA Space Apps Challenge	11:15 to 11:30	Auditorium Hall
4.	Team introduction and Elevator Pitching	11:30 to 12:40	Auditorium Hall
5.	Lunch	12:40 to 13:30	Auditorium Hall
6.	Working on ideas	13:30 to 15:30	Auditorium Hall
7.	Talk by Sai Kiran	15:30 to 16:00	Auditorium Hall
8.	Mapping and processing on Ideas	16:00 to 18:00	Auditorium Hall
9.	Break	18:00 to 18:30	Auditorium Hall
10.	Mentoring on ideated teams	18:30 to 21:30	Auditorium Hall
11.	Dinner	21:30 to 22:30	Auditorium Hall
12.	Networking and Prototyping	22:30 to 00:00	Auditorium Hall

**Day 2:**

S.No	SESSION	TIME	VENUE
13.	Networking and Prototyping	00:00 to 01:30	Auditorium Hall
14.	Fun session and Band	01:30 to 02:30	Auditorium Hall
15.	Validation of Ideas	02:30 to 03:30	Auditorium Hall
16.	1st round of Scrutinization	03:30 to 06:30	Auditorium Hall
17.	Freshup and Breakfast	06:30 to 07:00	Auditorium Hall



18.	2nd round of Scrutinization	07:00 to 08:30	Auditorium Hall
19.	Final Pichings	08:30 to 8:45	Auditorium Hall
20.	Awarding Ceremony	08:45 to 09:10	Auditorium Hall
21.	Closing ceremony	09:10 to 09:30	Auditorium Hall

#### **ABOUT THE EVENT (in detail):**

The event began with an inauguration ceremony after which the pitching started. Upto 84 teams were registered and participated as a part of the pre-qualifier round. During the elevator pitch, each team was given about 2 minutes to register their team into the competition.

Post lunch, the students started working on their ideas from given challenges. The mentoring was provided to students by experts on Android Developing, Web developing, Artificial Intelligence and Blockchain. They were also mentored on projects related to Civil, Electrical, Electronics and Mechanical backgrounds.

Students were able to interact with the mentors from SUMVN and get valuable inputs from them and validate their ideas and work on the loopholes their ideas might have.

The fun session involved music and dance which was performed by VIVID from the Nations Rock Beat community. During and after which the mentor validated the ideas of students.

During the first scrutinization each team was given 3 to 5 minutes of time to pitch their idea among which top 10 teams were selected to move into the next round. The second round of pitching started after Breakfast after which top 4 teams were selected by the jury and awarded.

#### **MEMBERS OF THE JURY:**

- Sai Kiran Katapally (Local Lead of Space Apps hyderabad)
- Narender Krishna (Local Lead Space Apps hyderabad).

#### **WINNERS OF THE HACKATHON:**

##### **• Christopher:**

Christopher is an idea which was originally ideated to create an operating system for the blind. The prototype of the team included an android app which they demonstrated on the day of the event.



- **Holographic Intelligence:**

Holographic Intelligence (HI) is an idea that uses Holograms to deal with demonstrating ways to solve everyday problems and also those the astronauts might face in space. This team used the technologies like AI and holograms.

- **Exoskeleton:**

Exoskeleton is an idea that deals with creating better battle suits with a special type of resin. The aim of the project was to create better armours for the soldiers and also to improve their strength in the field.

- **Voipin:**

VOIPIN is an idea that uses voice recognition to provide security. It includes the study of various variations of voices and how Artificial Intelligence can be used to detect the features of the user.

The winners were selected based on how technically sound they were, their creativity and the open data sets used by the students. The winners were also chosen for a bootcamp that was conducted on 30th March 2018, where they were asked to update about the progress about the project that they presented on the day of the hackathon.

**RESOURCES PROVIDED:**

- Printing brochures and posters.
- Food (dinner and breakfast).
- Tea and snacks.
- Electricity.
- Wi-fi.
- Water supply.
- Faculty incharges.
- Photography.
- Social media support.
- Transportations.
- Kits, ID cards and Tags.
- Momentos.
- Certificates.

**Results:**

- The event was successful with 264 participants.
- Among 84 teams 4 top teams were selected for the next round of the local level of Hackathon.



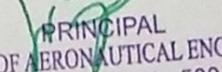
- The winners were chosen to attend the bootcamp in ICRISAT.

#### Feedback and learning points:

- On behalf of my team put on a review that the event at IARE which was a 24 hour hackathon was a new wholesome experience with the provision of all the supplements necessary. The hackathon was well accomplished, I feel a great responsibility among the volunteers and organizers indeed. They were the supporting pillars to successfully acclaim NASA Space Apps challenge. Last but not the least the honorary judges for whom we compiled to win the challenge! We there by submit a positive response from team **Holographic Intelligence** in accordance with the event organised - Team HI
- We got to know other contestant's ideas and also to what level we have to rise to be in the race at the hackathon. Overall it was a good session - Team **Christopher**.
- The bootcamp at ICRISAT was a good, we expected for the speakers Mr. Jayesh Ranjan and Mr. Bergvinson and proper appraisal about the scenarios of pitching elements and team filtration process of the next round.
- We got to know about the no. of participants and had a chance to listen to their ideas which were all unique and innovative. It was a good experience to be in ICRISAT for the first time.

#### Future Development:

- To create a community called Space Apps student community to ensure that the students learn about technology and build up their ideas into products and solve real time problems of world which will be addressing in upcoming hackathons which are going to be conducted in the future.
- To support the students selected to the next round of Space Apps hackathon by providing relevant mentors and technical experts.
- To support innovations in the community from layman and young students.

  
PRINCIPAL  
INSTITUTE OF AERONAUTICAL ENGINEERING  
Dundigal, Hyderabad - 500 043  
Telangana State