



NASA SPACE APPS CHALLENGE ATHLONE

TU Shannon: Midlands Midwest

SAHIR SHARMA

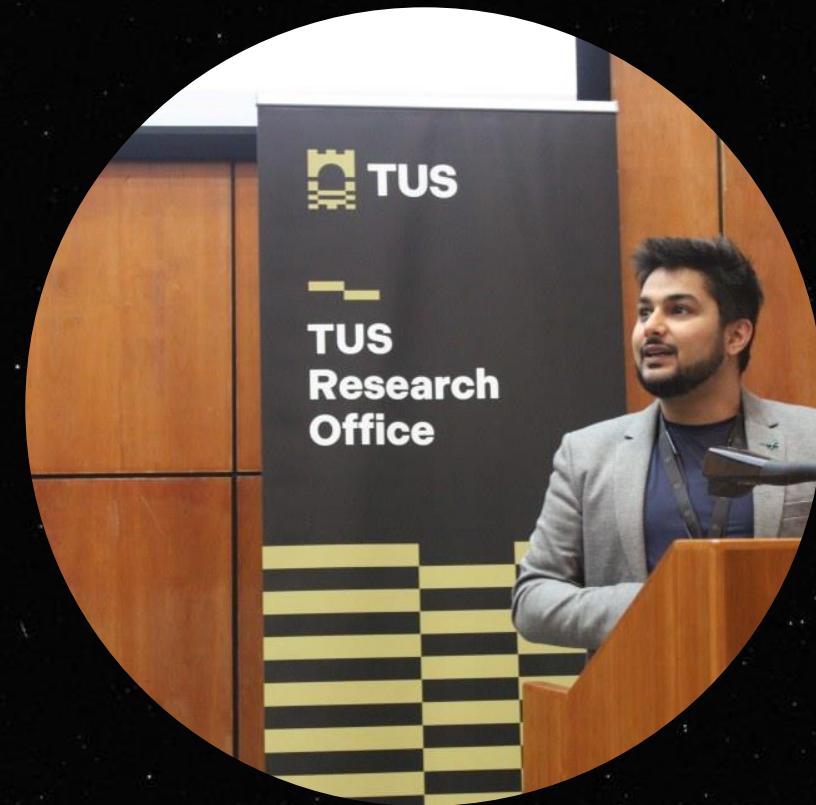
NASA Space Apps Challenge Local Lead
PhD Student, TUS Midlands Midwest



Participant Information Deck

Invitation for participants to attend
the NASA Space Apps Challenge
Athlone on 4th, 5th and 6th Oct'24





Meet the NASA Space Apps Challenge Local Lead for Athlone

Sahir Sharma

PhD Student in Extended Reality at TUS Athlone
(under supervision of Dr Niall Murray and Dr Conor Keighrey)

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01

What is Space Apps?



What is Space Apps?

Initiated in 2012

Till now, 280,000+ Registrants /
180+ Countries have taken part

World's Largest
Annual Hackathon!

Hosted by NASA's Earth
and Science Division

48 hours nonstop, fun packed

This year it is happening on
Oct 4th - 6th 2024

Athlone is 1 of 400+ host locations

The event embraces collaborative problem solving with a goal of producing **open-source solutions** to challenges we currently face on Earth and in Space. This event is **open to the public** and **free for all** ages to attend.

Details on this year's event can be found at
<http://spaceappschallenge.org>





DISCOVER

Space Apps in numbers to date

280k+

PARTICIPANTS

2400+

LOCAL EVENTS

185+

HOST COUNTRIES

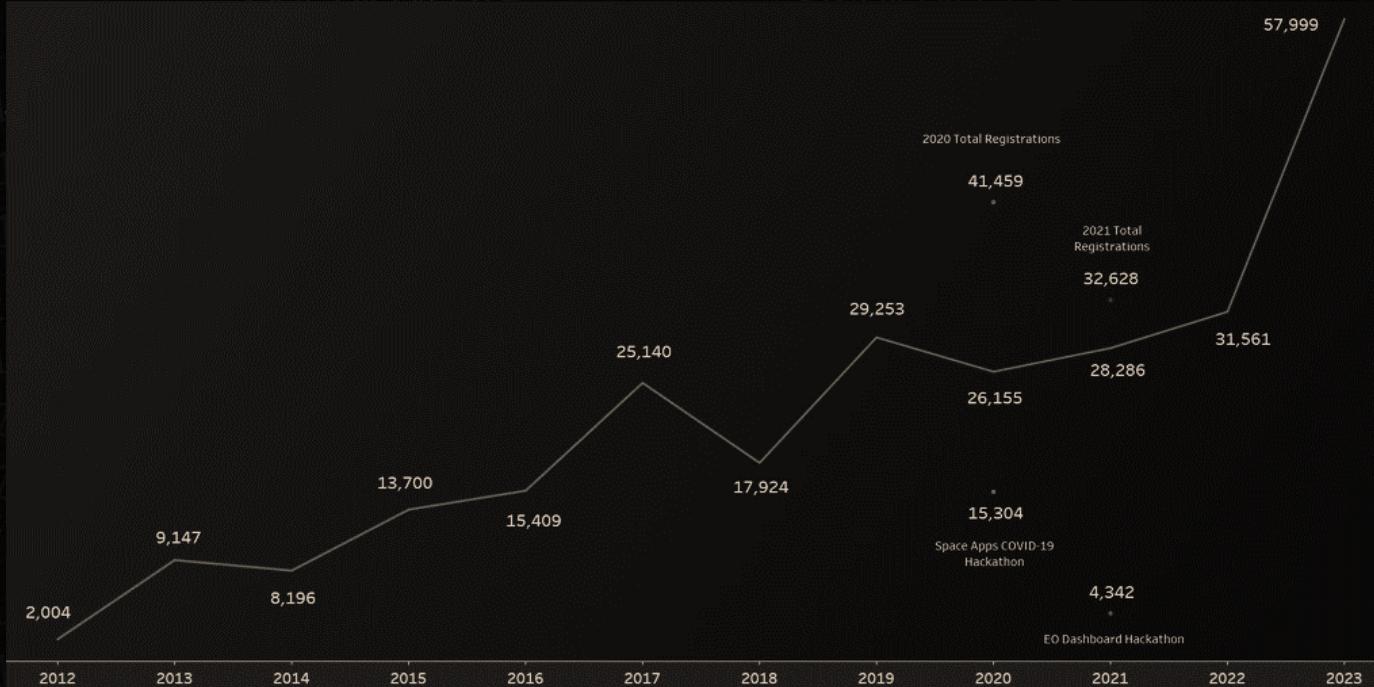
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SPACE AGENCIES



DISCOVER

Space Apps in numbers to date





Space Apps'23 Global Numbers

👤 **57,999**
Registered Participants

🌐 **152**
Countries / Territories

👥 **8,715**
Teams

TOP 5 COUNTRIES
By Number of Registrants

India | Egypt | Turkey
Brazil | Pakistan

📄 **5,556**
Projects Submitted

💻 **30**
Challenges

🚩 **402**
Local Events



🚀 **13**
Space Agency Partners

👍 **516M**
Social Mentions Reach

📝 **12**
Global Offers

🌐 **3,195**
Universal Event Registrations

🎓 **135**
Subject Matter Experts

⭐ **24**
Navigators

🤝 **26**
Amplification Collaborators



02

Space Apps Athlone 2024 Or hackATHLONE 2.0

Space Apps in Athlone

Engineering Building (TUS Athlone) is 1 of the 400+ locations hosting this year's hackathon.

150 Participants will be on campus for 48 hours working on 20 diverse problem statements.

Only location in Midlands to host the event in-person, where skilled mentors from both Academia and Industry will join in to assist the students in pushing out quality projects.

Only location in Europe that will be livestreaming the event, this time with live project BTS. Visit hackathlone.com for more.





Before the Event

1st Sept'24

Registration is LIVE!

10th Sept'24

Ireland wide Campaigns to get participants

2 x Desks to be setup in the University (For volunteers who can sit there and advertise), with banners. Social Media will be boosted with competition awareness. Campus Ambassador strategy to kick in.

12th Sept'24

Challenges are released in detail

Social Media will follow challenge a specific narrative. Challenge specific experts will be approached for mentorship/judging/sponsorship. Membership drives in other universities through Campus Ambassadors.

19th Sept'24

Join/Create a Team.

Team formation officially begins, participants will be given up to the end of the hackathon to decide on this.

25th Sept'24

Online Bootcamp (Optional) for the participants

Various hackathon relevant sessions and resources will be scheduled and shared with the participants.

Day 1 (Friday : 4th Oct'24)



17:30-18:00

Registration Check

Participants register themselves at the Engineering Building desk to collect IDs, T-Shirts and Merchandise.

18:00-18:45

Opening Ceremony & Hack 101

The event's venue, provisions, itinerary, judging criteria, NASA's Challenges and Open Data are discussed in detail.

18:45 – 19:30

PITCH101 & Pitch-Fest

30 seconds stage time for everyone, A Pitch-Fest is a rapid networking event that helps in skill discovery.



19:30 – 20:00

Team Formation Session + Disperse to Workspaces

30 different QR codes, 1 for each challenge will be on display in the atrium to help in clustered networking. As soon as participants form teams, they will be allocated a workspace for the hackathon

21:00 – 21:30

Pizza Time!

Come down to the Engineering Building Atrium Area for some pizza on the house



Day 1 23:00 – Day 2 06:00

Overnight Hacking, Snacking & Napping

Continue working on your projects in your workspaces and drop down to the support desk for some midnight snacks.



Day 2 (Saturday : 5th Oct'24)



9:00-10:00



10:00 – End of Event

Breakfast

Come down to the Engineering Building Atrium for some peanut butter and jelly or cereal as you like

Mentor and Support Hours (10 AM -End of Event)

Mentors from diverse backgrounds would be accessible to all participants (first come-first served)



13:00 – 14:00

Lunch

Grab and go with some sandwiches from the Atrium but make sure to keep your workspaces clean!

14:00 – 15:00

“Design Hacking” by Design Brew

Hands-on design workshop relevant for the hackathon. TopicTBD

15:00 – 16:00

“Resume Hacking” by Prashant Chauhan

Hands-on workshop to edit resumes and approach job applications in Ireland. TopicTBD

16:00 – 16:30

Coffee Evening and Important Announcements for Day 3

Come down in front of X103 for some coffee and to get some relevant information about the Final Demo Day



Day 2 21:00 – Day 3 06:00

Pizza + Overnight hacking and snacking

Come down to the Engineering Building Atrium Area for some pizza and snacks on the house



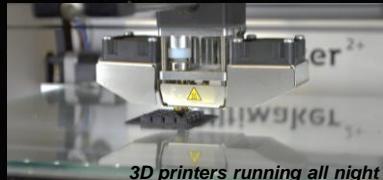
Day 3 (Sunday : 6th Oct'24)

9:00-10:00



Breakfast

Toast, fruits and muffins on the house @ Engineering Building Atrium (in front of X103)



3D printers running all night

Mentors assisting all night



10:00 – 12:00

Practice Presentations and Feedback Sessions

Time and feedback will be given to assist the hackers with a dry run of the presentation (Sessions in Y103 and X103)



13:00 – 14:00

Lunch

T. minus 1 hour, fuel up before the presentations start!

14:00 – 17:00

Final Presentations

The time for the participants to show off their hard work during the event!

17:00 – 17:30

Judges Deliberation and Feedback Session

Judging sheets are tallied, meanwhile participants fill HackAthlone'24 feedback form.

17:30 – 17:45

Awards and Closing Ceremony

The Global Nominees are announced, along with some next steps.

17:45 – 18:00

Wrap Up and Disperse

Some final comments by organizers and the Host institution by all members disperse after the event concludes.





Itinerary (After Space Apps)

October 4th
October 5th
October 6th

In-person 48 -hour Hackathon Event followed by Global Nominations

The hackathon starts at 6PM on Friday 4th October 2024 and ends at 6PM on Sunday 6th October 2024 (48 hours are inclusive of the opening and closing ceremonies with the presentation and results)

6th Oct' 24 (23:59)

Global Project Submission Deadline

Projects will be considered for Global Judging only if submitted online in the portal (before 23:59 6th Oct'24).

January 2025

Global Results

Each year, winners of the Global submission are called over to NASA for a fully funded trip to view a rocket launch and discuss possibilities for incubation on the idea.



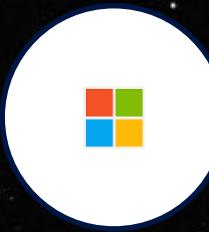
Global Collaborators for this year

Each year the NASA International Space Apps Challenge Global Organizing Team collaborates with organizations from around the world to provide participants and/or Local Leads with tools and resources that enable the creation of solutions. These tools and resources can be used for free during the event.

Global Collaborators for previous Space Apps have included the following:



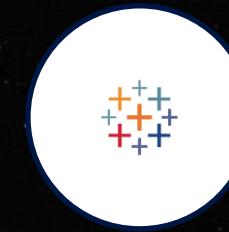
Google



Microsoft



Meteomatics



Tableau



GoDaddy

Space Agency Partners

In 2024, NASA collaborated with even more space agency partners to bring the largest annual global hackathon to communities around the world!

These space agency partners along with NASA's engineers at the Earth Science Division produce the innovative problem statements (literally out of this world).

They provide access to their satellite data and other resources around Earth Observations for solving the challenges





03

HackAthlone Provisions

What will the participants get ? – for working on projects

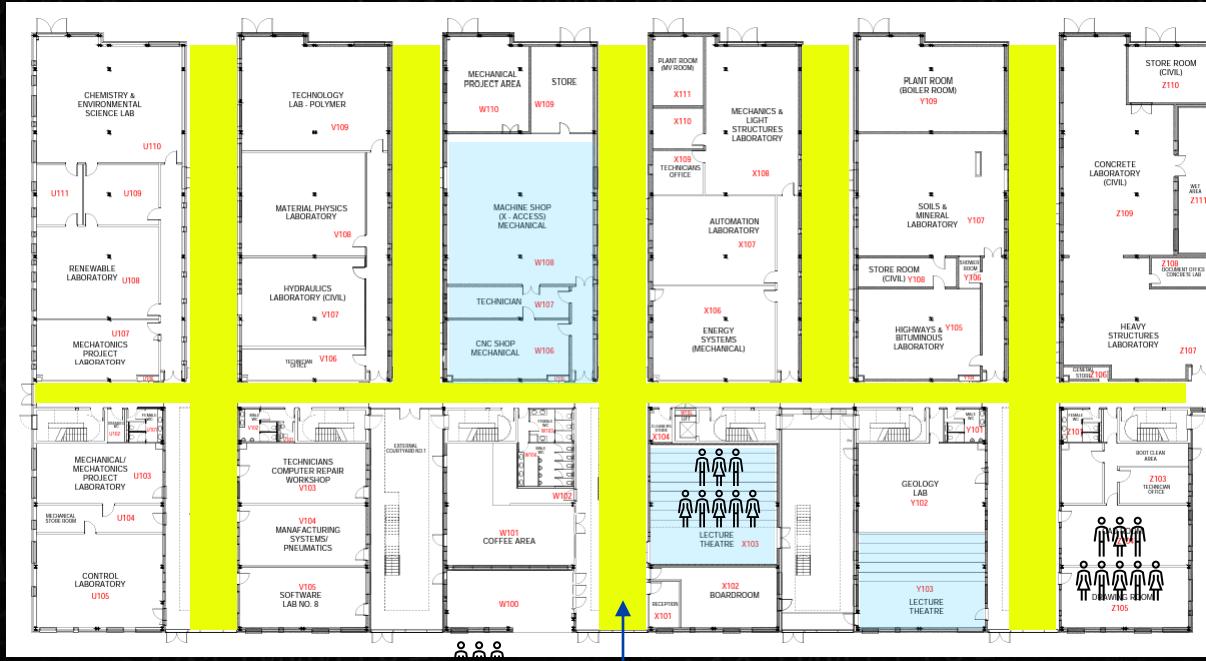
Challenges, Resources and Community



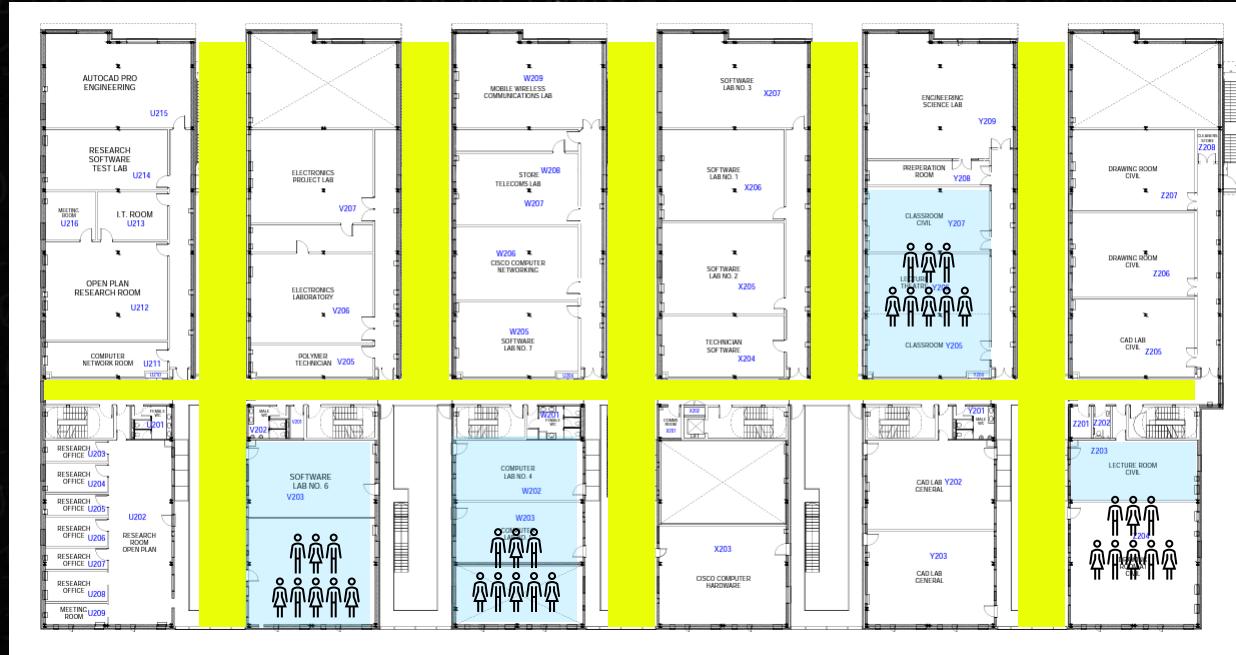
1. NASA engineers develop interdisciplinary problems for the Space Apps hackathon, welcoming diverse participants to contribute innovative solutions. [20 challenges](#) are presented this year, including creative tasks for all skill levels.
2. NASA has [OpenData](#) that is one of the biggest repositories of open source data.
3. Participants in the Space Apps community connect with space enthusiasts to tackle pressing issues through rapid problem-solving. The hackathon offers networking opportunities with [experts, mentors, and key opinion leaders](#) for collaborative projects.



Venue (1/3) – Engineering Building @TUS



Venue (2/3) – Engineering Building @TUS



First Floor – Engineering Building at TU Shannon Athlone

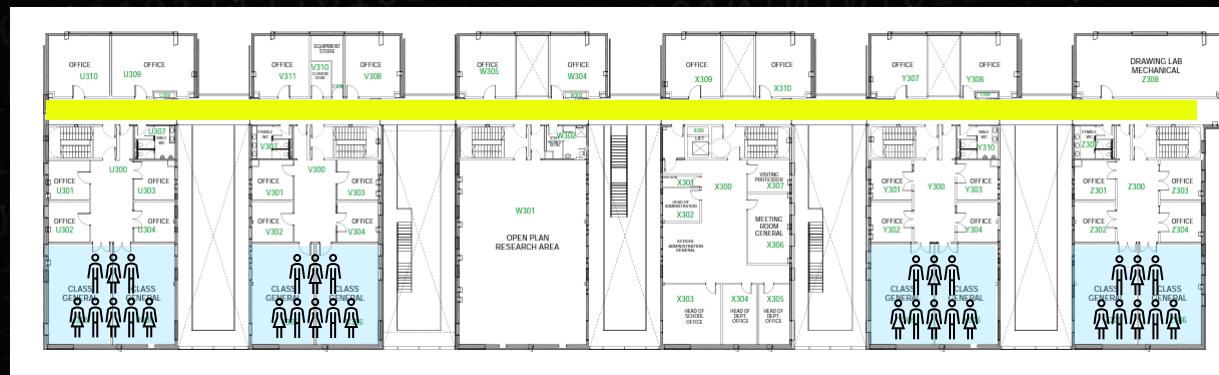
Will mainly be used for Software Lab Access

Venue (3/3) – Engineering Building @TUS



Second
Floor –
Engineering
Building at
TU Shannon
Athlone

Will be used
for access to
work rooms



Support – HackShop, HackLab, Mentorship



HackShop



HackLab



Mentorship

Uno, Raspberry boards, Variety of sensors (IR, Bluetooth, Wi-Fi, IMU, Camera, Humidity, Ultrasonic, Gas, Sound, LCD, Pressure, Piezo, NFC, RFID), Motors (Stepper, DC, Vibration, Buzzer), 9V Battery, Jumper Cables, Splitters, Connectors, Resistors, Diodes, Capacitors, Breadboard, PCB Boards, LEDs, Relay Switches

Access to 3D Printers, AR/VR Devices, Google Cardboard, Screwdrivers, Vernier Callipers, Mechanical Workshop, Soldering Station, Glue Gun Station, Wire Cutter, Potentiometers, Multimeter, Whiteboards

Mentors from different subject matter backgrounds (both across industry and academia) relevant to the challenges and the projects will be made available to the participants for feedback and guidance.

**The open concept of “HackShop” is borrowed from a series of hackathons that have been taking place in MIT (called HackMIT).*



Fuel (F&B arrangements)

F&B provision made by the organizers for all the confirmed participants, mentors and judges as per the following:



Day 2 (5th Oct'24) Saturday Breakfast



Day 2 (5th Oct'24) Saturday Lunch



Day 2 (5th Oct'24) Saturday Evening Tea



Day 2 (5th Oct'24) Saturday Dinner (Pizza Night)



----- Overnight coffee -----



Day 1 (4th Oct'24) Friday Coffee Evening



Day 1 (4th Oct'24) Midnight Munchies/Dinner
----- Overnight coffee -----



Day 3 (6th Oct'24) Sunday Breakfast



Day 3 (6th Oct'24) Sunday Lunch



Day 3 (6th Oct'24) Sunday Evening Tea

Prizes, Awards and Goodies



First Prize: **€1500**

Second Prize: **€750**

Third Prize: **€250**

Most Viral Post: €50

Runner Up Viral Post: €25

Funniest Post: €25



HackAthlon T-shirts for all participants.

Certificates for all participants

Special merchandise for winners, volunteers and ambassadors.



Get nominated as a global nominee

Get incubated by NASA for your project

Chance to go on a fully funded trip to NASA and view a rocket launch





To summarize – What do participants get?

- A certificate from NASA authenticating project submission in a NASA Space Apps Challenge.
 - Access to a **community** of problem solvers who build go-to-market solutions in 48 hours.
 - Access to resources, components, technical equipment, food and a venue to work on the projects.
 - Mentor support and continuous feedback throughout the hackathon so that a high-quality projects could be made through repeated iterations.
-
- ```
graph TD; A[Free to attend Event] --> B[All support provided for working on a NASA project for 48 hours]; B --> C[Great addition to a Resume]
```
- A vertical bracket on the right side of the slide groups the last four bullet points together. Three yellow-bordered boxes are positioned to the right of the bracket: the top box contains "Free to attend Event", the middle box contains "All support provided for working on a NASA project for 48 hours", and the bottom box contains "Great addition to a Resume". Arrows point downwards from each box to the next one in the sequence.



NASA  
INTERNATIONAL  
**SPACE APPS**  
CHALLENGE

# THANK YOU

[spaceappschallenge.org](http://spaceappschallenge.org)