



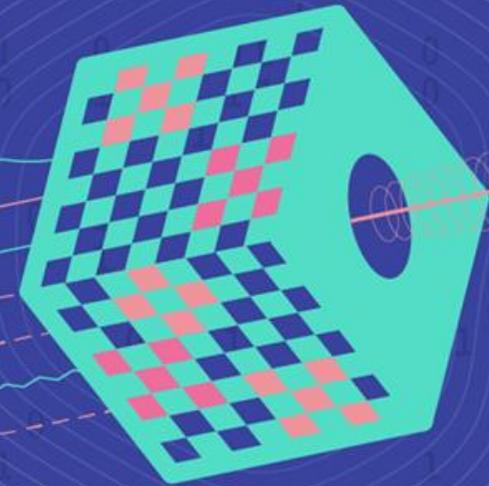
CASSINI
Hackathons & Mentoring



CASSINI
Hackathon
Cyprus



Introducing CASSINI Hackathons Series and CASSINI Cyprus Hackathon



Implemented by

VERHAERT | MASTERS IN INNOVATION



Gravity

space-tec
PARTNERS

Introducing CASSINI

The European Commission launched the **Competitive Space Start-ups for Innovation initiative (CASSINI)** in 2021 as a part of broad effort in support of space entrepreneurship for a digital and sustainable Europe.

Launching March 2021, the EU Space Hackathons & Mentoring

will be the first flagship initiative.



CASSINI
Hackathons & Mentoring

[hackathons.cassini.eu/
cyprus](https://hackathons.cassini.eu/cyprus)



Earth observation

Copernicus is the European Union's **Earth observation programme**, looking at our planet and its environment to benefit all European citizens.



Satellite navigation

Galileo is Europe's **Global Navigation Satellite System (GNSS)**, providing improved positioning and timing information with significant positive implications for many European services and users.



The European **Geostationary Navigation Overlay Service (EGNOS)** is Europe's regional satellite-based augmentation system (SBAS) that is used to improve the performance of global navigation satellite systems (GNSSs).



Secure connectivity

The European Union **Governmental Satellite Communications (GOVSATCOM)** programme provides secure and cost-efficient communications capabilities to security and safety critical missions.



CASSINI
Hackathons & Mentoring

The CASSINI Hackathons

6 Hackathons

60 Local Organisers

10 per edition

Hybrid

Local

European

Global Themes

You?

Why get involved?



Contribute toward solving important problems for society & industry



Foster the next generation of entrepreneurs & problem solvers



Gain exposure as a part of a pan-European event



Connect with the EU Space ecosystem

CYPRUS joins 1st EDITION
in 10 locations across EU





€10,000
CASH PRIZES
+€5,000
SERVICES

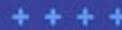
1st CASSINI Hackathon

Theme: **DIGITISING GREEN SPACES**

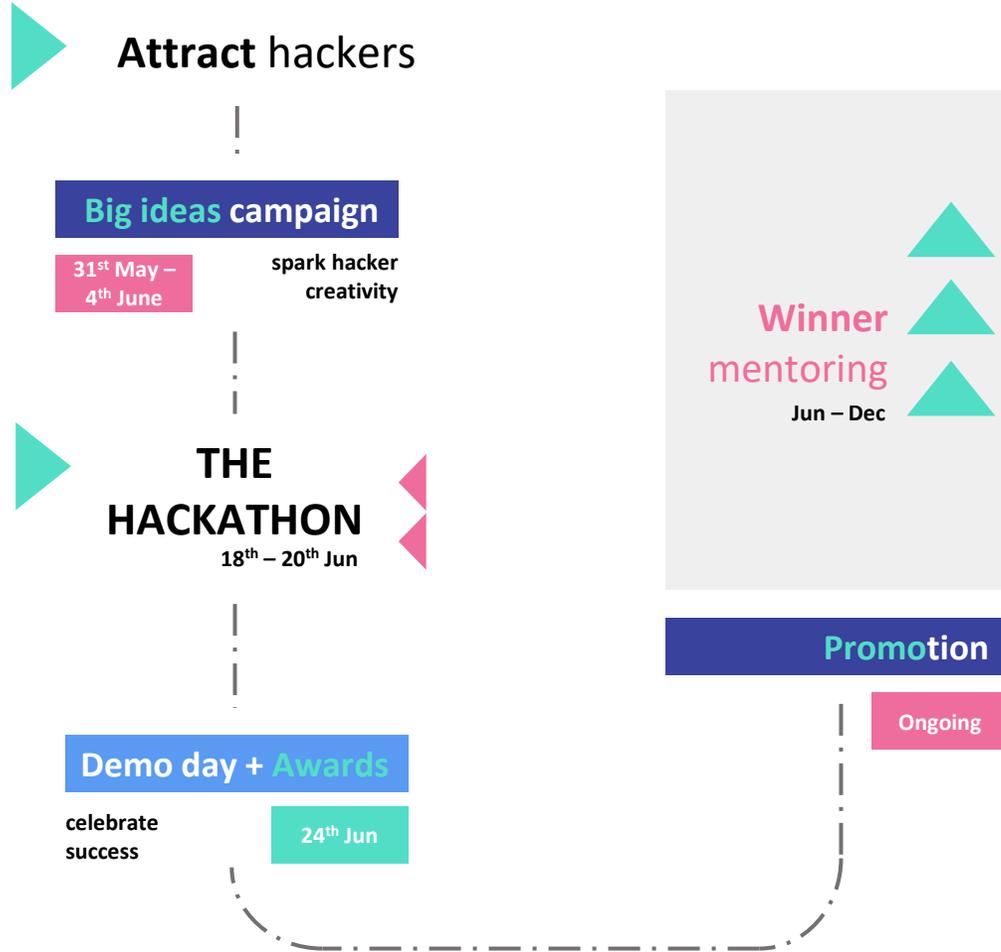
Key dates:

BIG IDEAS Campaign: 31 May - 4 June 2021

HACKATHON Weekend: 18 - 20 June 2021



The hackathon timeline & global theme



Digitising green spaces

The first CASSINI hackathon will challenge hackers to use **geospatial information from Copernicus** Earth observation data and its services and/or **positioning technologies from Galileo & EGNOS** to develop innovative solutions that look to digitise our green spaces.

European space technologies can help us to access, understand and protect our nature in many different ways. From monitoring vegetation changes over time, developing 'green' indicators and optimal access routes, through to forecasting air pollutants, UV indices and park congestion, the options are countless. Hackers will be supported with two pre-processed data cubes to provide easy access to data collected specifically for the hackathon.

Solutions can be proposed to **three challenges**:

Discover your city	Staying fit & healthy	Protecting our rural areas
		



Challenge #1: Discover your city

Green spaces are an important part of urban life and contribute toward **greater biodiversity, a reduction in pollution, and better human well-being**. They are particularly important in heavily built-up areas with high population densities and can help to improve residential attractiveness and quality of life for those that live there.

This CASSINI Hackathon challenge tasks hackers to **design products, devices, services, or environments that leverage European space data, information and signals** from Copernicus, Galileo and EGNOS that help urban citizens understand their city and its green spaces. We encourage hackers to dive into the areas of:

- Supporting urban planning and real estate development & valuations
- Discover green factors contributing to residential life
- Promoting ecological sustainability



Understanding how green spaces enrich urban living and fostering their continued development, accessibility and protection will also contribute to the United Nation's Sustainable Development Goal 11 to make cities and human settlements inclusive, safe, resilient and sustainable.



Challenge #2: Staying fit and healthy

Regular exercise and spending time outdoors is one of the most important elements of staying fit and healthy. It is good for both our bodies and minds, but it can sometimes be challenging to find the perfect place to exercise - particularly in urban environments!

This CASSINI Hackathon challenge tasks hackers to **design products, devices, or services that leverage European space data, information and signals** from Copernicus, Galileo and EGNOS that help city dwellers to stay in good health and promote well-being. We encourage hackers to dive into the areas of:

- Mapping and accessing green spaces for outdoor activity
- Forecasting air pollutants such as pollen, nitrogen oxide, or particulate matter
- Understanding and monitoring UV exposure



Encouraging urban citizens to utilise their local green spaces for mental, spiritual and physical exercise and rejuvenation will contribute to the United Nation's Sustainable Development Goal 3 to ensure healthy lives and promote well-being for all at all ages.



Challenge #3: Protecting our rural areas

Open and forested green spaces outside of urban environments offer many benefits to citizens. From providing people with natural spaces to visit and connect with nature, through to wildlife conservation and forest health, **our rural environments are of vital importance to creating a sustainable future.**

This CASSINI Hackathon challenge tasks hackers to **design products, devices, services, or environments that leverage European space data, information and signals** from Copernicus, Galileo and EGNOS that promote the digitisation of rural green spaces. We encourage hackers to dive into the areas of:

- Wildlife and ecosystem conservation
- Ensure healthy and resilient forests
- Development of new green spaces and underdeveloped areas



15 LIFE ON LAND



Using technology to promote healthy and resilient rural green spaces will contribute to the United Nation's Sustainable Development Goal 15 to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



Engagement Opportunities with CASSINI Cyprus Hackathon



Engagement Opportunities with CASSINI Cyprus Hackathon

About the Organisers



CyRIC helps businesses, inventors and entrepreneurs to design and develop their inventions and ideas into viable products and ventures. We have extensive expertise in the design and development of breakthrough products in IoT, robotics, drones, AI, wearable and biotechnology. Under the EUBIC label, the last 5 years CyRIC helped more than 500 startups and innovative SMEs and raised more than 20 million Euros. www.cyric.eu



GRAVITY is a new generation venture building incubator for technology and high growth start-ups housed in a state-of-the-art working space providing full support and amenities for entrepreneurial and business development. gravity.ventures



The ERATOSTHENES Centre of Excellence (ERATOSTHENES CoE) is an autonomous Centre of Excellence with Cyprus University of Technology (CUT) as its sole stakeholder aiming to become a viable, sustainable Centre of Excellence in Earth observation, space technology and geospatial analysis. eratosthenes.org.cy



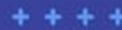
Engagement Opportunities with CASSINI Cyprus Hackathon

For Organisations

- Community Supporter
 - Organisations on Space/Remote Sensing, Computer Professionals, Hackers
- Stakeholder Supporter
 - Municipalities, Governmental bodies for Green Spaces, R&I Agencies
- Sponsor
 - Space/EO/Satcom Enterprises and Stakeholders
- Team participant
 - SMEs, Startups, Spin-Outs, University Lab/Departments

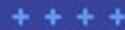
For Individuals

- Mentor/Expert
- Hacker/Participant



Engagement Opportunities with CASSINI Cyprus Hackathon

- Community Supporter - Stakeholder Supporter
 - Disseminate to members and audience for participation
 - Join Big Ideas campaign with a short talk
 - Join Hackathon weekend with workshop and provide mentors/experts
 - Receive publicity in local media and press releases





CASSINI
Hackathons & Mentoring

**For more information,
send us an email at cassini-hackathon@cyric.eu**

**Contact person for CASSINI Cyprus:
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