

Details and Preparation for Hackathon

Themes

Food/Water Security, and its Resilience within a Changing Climate is a United Nations sustainable development goal (https://sustainabledevelopment.un.org). Participants can choose any theme to work on during the Hackathon which could include:

- Use of logistics, supply chain and block chain for food/water security; •
- Smart agriculture;
- New services/technologies (e.g. smart insurance)
- Resource mapping/stock taking; •
- Any societal or technical challenge relevant to the theme.

Aims

- 1. Through knowledge exchange activity, develop solutions to address global and local needs applicable to all and based on specific food and water security challenges
- 2. Raise awareness locally, nationally, internationally of the commitment of University of Leicester in:
 - o developing solutions supporting UK and EU space, environment and security agencies.
 - the food and drink industries, a key sector for Leicestershire
- 3. Engage with students providing an opportunity on a challenge while increasing employment opportunity through exposure to networks and businesses

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Objectives

- To engage with new and existing individuals, companies, academics and • stakeholders to introduce the opportunities of Copernicus data
- To use the Hackathon as a vehicle for developing collaborative projects between academics and businesses.
- Develop new ideas in earth observation and in the Food and Drink industry

Structure of the Hackathon

1. Call for Ideas: 21 June - 21 July 2019

People interested in submitting an idea will fill and submit quick application form – deadline: 21 July. Please contact us to access the application form. Leicinnovation@le.ac.uk / 0044 (0)116 373 6435

2. Pitch Session for Participants: 26 July 2019

Participants will be invited to pitch their project at our glorious **Cake Friday** on 26 July 2019. This will be the opportunity to meet with the organisers and other participants and/or interested parties.

3. Selection Participants: 15 August 2019

Applications will be assessed by a Panel and a first set of projects will be invited to pitch at our **Cake Friday** on 26 July 2019.

4. Training weekend: Early September, date TBC

Training on Agile and Rapid MVP (Minimal Viable Product) developments will be delivered to the selected project teams and to any developers, designers, researchers and industry participants willing to take part in the Hackathon











5. Copernicus Data Hackathon : 19 & 20 September 2019

Over an exciting 48 hours, teams will work collaboratively using Copernicus data "coding experience" practically to develop solutions to address global and local needs applicable to us all based on specific food security challenges

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Leicester Copernicus Hackathon – Agenda

Please note that this is draft agenda may be subject to minor alterations

Day 1:

30-09:00: Arrival and registrations 09:00-09:30: Welcome, housekeeping, and introduction to the event 09:30-10:00: Introduction to proposals and group allocations 10:00-12:00: Teams working on proposals and design of solutions 12:00-13:00: Presentations by each group and feedback from audience 13:00-13:30: Lunch 13:30-19:30: Coding on each project with short feedback sessions every two hours 19:30-20:00: Packaging and leaving the code on the open source repository 20:00-20:30: Presentations by each group on what has been achieved and plans 20:30-21:00: Wrap up and close of Day 1.

Day 2:

09:00-09:30: Report by each group on lessons learned and plans for day 2. 09:30-13:00: Coding on each project with short feedback sessions every two hours 13:00-13:30: Lunch 13:30-15:30: Coding on each project with short reports/feedback sessions every two hours 15:30-16:30: Packaging and leaving the code on the open source repository 16:30-17:30: Presentations by each group on what has been achieved and future plans 17:30-18:00: Wrap up and close of the event







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Call for Ideas

"Let's Invent the Future Together!"

Calling Innovative and entrepreneurial individuals and/or groups of people to submit proposals that will address challenges around the theme of Food and Water security for a sustainable future!

The proposed thematic event is closely tied to the United Nations sustainable development goals (https://sustainabledevelopment.un.org) focusing on European Food/Water Security, and its Resilience within a Changing Climate. Earth Observation is becoming an increasingly important tool for society to monitor and manage natural resources that are vulnerable to climate change. Observations of the Earth system from satellites and other terrestrial platforms have now become a routine part of daily life - often unnoticed but important to millions of people's lives. A significant proportion of the world's population are currently regularly impacted by drought, which subsequently impacts crop yields and the ability to rear livestock. This situation is exacerbated by climate change effects and lack of actionable information. Therefore, UoL believes that issues relating to water/food security, climate change and promotion of partnerships facilitated through activities such as this proposed hackathon are part of the sustainable development goals.











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We anticipate the following themes to be explored through the hackathon: (i) the role and use of logistics, supply chain and block chain through food/water security; (ii) new mitigatory services (e.g. smart insurance), (iii) thematic climate products for smart agriculture, and (iv) resource mapping/stock taking.

The solution should aim at supporting a common goal of food and water security, community cohesiveness and greater awareness of critical societal issues and challenges.

If you have a project idea for the Copernicus Hackathon event, please read the following instructions to ensure that the idea is new and requirements and functionalities of the application are recorded.

Step1: Please check to see if a solution already exists, search app stores with a wide range of keywords. If a solution does not exist or if it exists but does not have the features you need, then it is worth going forward and innovating the product.

Step 2: Understand your audience: Who are the people that will use the proposed solution? And is it really wanted/required? A tip is to ask 5 people who make up your audience and to ask them if they would use or see a purpose in the proposed solution? It may also be worth getting those 5 people to become your user focus group after the Copernicus Hackathon. Spending time with your audience to test your work will produce dividends. They can see if it works and gives you constant feedback on improvements.









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Step 3: Working in isolation on any project will deny you the pleasure of other people's company, the sharing of tasks and the input of ideas and experience from others. Experience shows that the best way to turn up to a Copernicus Hackathon is with a team of people from your organisation or social network, each willing to put in some work into the process, sharing a common vision. To this end, it is not recommended that this project is done in isolation. Instead, share your idea to be submitted with people you know and look to develop a team of 2 or 3 people before attending the hackathon. Remember that it won't be just during the Copernicus

Hackathon whereby support is needed, a commitment to meet and work on the idea with the team from the Copernicus Hackathon will more than likely be needed for some time after the event, if you want to make the application a reality.

Important Note: if the proposed project is going to work within your organisation you need to bring along the technical people who could provide necessary information for integration and can access to test the idea. Please also mention this in your submitted proposal, as otherwise all the work might be lost if you are left with a piece of software to install on a complex system on your own after the event.

Step 4: Sustainability after the Copernicus Hackathon: There will be more work needed in the teams assembled after the event. This means more meetings, communication and work after the event. This is something to consider and be aware of before submitting an idea. Consider funding options for completing the application after the event. Finding funding sources based on the prototype created during the Copernicus Hackathon is necessary to ensure the application will be completed and will reach its target end-user. The team in place for the Copernicus Hackathon and more largely University of Leicester will talk to teams to find funding opportunities to









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continue the project post- Copernicus Hackathon, where possible. There are several sources of help in Leicester and we will introduce some of them during the event.

Pre-Event Judging

The organising committee of the Copernicus Hackathon will cross-review all the proposals and score them. Criteria for scoring are explained below. Please note that not all of the ideas and problems submitted will be viable for the event. This could be due to a number of reasons including:

- There are normally more problems submitted than can be solved over the two days event. The resources and people needed may just not be sufficient to work on all problems in a two days period.
- Many of the problems submitted may already have a solution in the marketplace.
- The problem may be too ambitious to achieve any of its objectives over the weekend.
- The problems may not have demonstrated how they can or should work on paper sufficiently.

Selection Criteria

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The ideas and problems submitted will be judged on the following criteria:

- 1. Quality of the proposal: 25%
 - 1. Has any research into the idea been done?
 - 2. How complete is the idea?









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2. Impact: 25%

- 1. Does it solve a problem that exists?
- 2. What is the potential market? How many people could it potentially assist?
- 3. Is it in line with the Copernicus Hackathon's objectives of supporting a common goal of food and water security, community cohesiveness and greater awareness of critical societal issues?

3. Innovation: 25%

- 1. Is this a new solution to the problem? Does a similar product exist? Does it have any unique features to distinguish it?
- 2. Does it innovate on any design features or technical solutions/aspects?
- 3. Is there a new approach to an old solution (within the product) that already exists?

4. Sustainability: 25%

- 1. Is there a long-term vision for the idea and product?
- 2. Is there a team behind this idea?
- 3. How will this drive forwards after the event, until completion?
- 4. Is there a possibility for funding for remaining of the project? Has this been identified and clearly described?

How do I submit my proposal for the Copernicus Hackathon?

Ideas will be submitted via the link below. Submissions are welcome until 21 July 2019.

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Submit Your Proposal!













