



# **FAMINE & FOOD CRISIS FORECASTING CENTER**

## **HACKATHON #1:YEMEN**

**Day 2: Understanding Crisis Data from Yemen**

Springboard Grant – Tier I  
Sep 1, 2022 – August 31, 2023



## Day 2 Hackathon Agenda

- **9:00 - 9:30 am: Goals & Instructions**

Go over the goals and instructions for the next two days of the hackathon and make sure all teams have clear tasks and computers ready for a successful experience.

- **9:30 - 10:00 am: A workshop**

Reality of on the ground data collection for emergency assessments

- **10:00 am - 12:00 pm: Breakout Hacking Session**

Work in teams and participants tasked with exploring the OCHA data on famine in Yemen. Each team will brainstorm ideas, select data, and draft questions that will be used to guide the analysis of their team.

- **1:00 - 2:00 pm: Working Lunch & Project Review**

A working lunch during which participants review their progress with the Hackathon staff and make any necessary adjustments.

- **2:00 - 4:45 pm: Breakout Hacking Session**

Work in teams and finalize analysis plan for the OCHA data, produce analysis results, and report their findings through 1-3 summary slides.

- **4:45 - 5:00 pm: End of Day Summary**

Closing comments, with a compilation of summary slides and homework assignments (of course).



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# **PREPARING YOUR COMPUTER FOR HACKATHON SUCCESS**

**KYLE MONAHAN**      MANAGER, DATA SCIENCE SERVICES

**BINGJIE ZHOU**      DOCTORAL STUDENT, FRIEDMAN SCHOOL (NEDS)

# Where you are going

**CRAWL**



Feb

**WALK**



March

April

**RUN**



May

June

July 2023



We are here

# Where you are going

**Feb:** First **hackathon:**  
Learn to explore data, create our first dynamic maps.



Feb

Ukraine

Yemen



March

April

**May:** Third **hackathon:** Compile high-quality analysis and publishable figures.



May

June

July 2023

Yemen



We are here

**Mar:** Second **hackathon:** Create questions with **impact**. Develop, design, and deploy **interactive dashboards, maps**. Apply data science.

Ukraine

Yemen

South Sudan

**June/July:** Summary meeting to disseminate dashboards, hackathon materials, and review results.

# Where you are going

CRAWL



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WALK



March

April

RUN



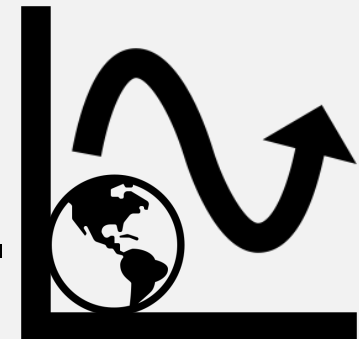
May

June

July 2023

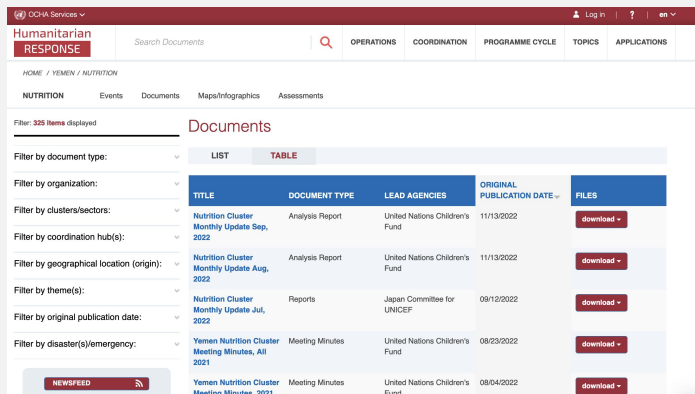
Developing *mastery* in...

Geospatial time series famine data.



# Steps for hackathon one

## DATA



The screenshot shows a web interface for 'Humanitarian Response' with a search bar and navigation tabs. The 'Documents' section is active, displaying a table of documents with filters on the left. The table has columns for Title, Document Type, Lead Agencies, Original Publication Date, and Files.

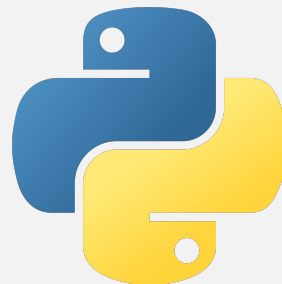
TITLE	DOCUMENT TYPE	LEAD AGENCIES	ORIGINAL PUBLICATION DATE	FILES
Nutrition Cluster Monthly Update Sep, 2022	Analysis Report	United Nations Children's Fund	11/13/2022	download
Nutrition Cluster Monthly Update Aug, 2022	Analysis Report	United Nations Children's Fund	11/13/2022	download
Nutrition Cluster Monthly Update Jul, 2022	Reports	Japan Committee for UNICEF	09/12/2022	download
Yemen Nutrition Cluster Meeting Minutes, All 2021	Meeting Minutes	United Nations Children's Fund	09/23/2022	download
Yemen Nutrition Cluster Meeting Minutes, 2021	Meeting Minutes	United Nations Children's Fund	08/04/2022	download

## MERGING, UNDERSTANDING, CLEANING



## PRODUCT

- Slides w/ tables, exploratory graphs & charts
- Dashboards
- Interactive maps
- An interactive map with video walkthrough



# How do I access these software?

- The **TTS Remote Lab (Adobe)** provides access to graphic or data-intensive software such as Adobe Creative Cloud suite, GIS, ENVI, SAS, SketchUp Pro, etc
  - Access the TTS Remote Lab (Adobe) on a **Windows Computer**
  - Access the TTS Remote Lab (Adobe) on a **Mac Computer**
- The **TTS Virtual Lab (VDI)** provides access to general computing software and resources. No Adobe Creative Cloud suite, GIS, etc.

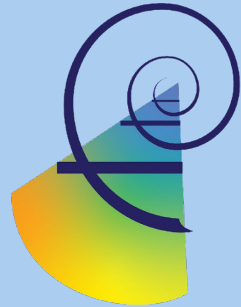
For inquiries regarding which remote solution is right for you, please contact [DataLab-Support@elist.tufts.edu](mailto:DataLab-Support@elist.tufts.edu)

## How can I prepare for the hackathon?

You can just arrive, no need to prepare, however, be sure to check out the suggested pre-trainings if you want to enhance your technical skills!

- R
  - [Intro R](#)
  - [Data visualization in R](#)
- Python
  - [Intro to Python](#)
  - [Scientific Computing with Numpy](#)
  - [Getting started with Python Data Analysis](#)
- Geospatial
  - [Raster analysis & remote sensing data in Python](#)
  - [Geospatial Python analysis](#)





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**Feinstein  
InternationalCenter**

# **REALITIES OF DATA COLLECTION**

**MERRY FITZPATRICK** ASSISTANT PROFESSOR, FEINSTEIN INTERNATIONAL  
CENTER

# Content

# HACKING GROUPS!

- Read through Glossary
- Explore dataset
- Create timeline of events relevant to your research question
- Review Gantt chart
- Create visualizations
  - Is there missing data?
- Complete slide with your findings!





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## **HACKATHON #1:YEMEN**

Team Presentations, Day 2