Team B

Environmental MosAIc

Tell us about yourself

1. Personal Introduction: Share a brief background about yourself, including your name, where you're from, and what brings you to this hackathon?

2. Team Contribution: What unique contribution do you think you can bring to a team project in this hackathon, considering your skills, experiences, and interests?
3. I’m really interested in connecting social data with geospatial data.

Choose 2

1. **Academic and Professional Background:** What is your academic or professional background, particularly in relation to ecology, geography, or data science?
2. **Specific Skills:** Can you identify specific skills or expertise you possess that are relevant to environmental data science? For instance, are you proficient in any programming languages, data analysis, GIS mapping, etc.?
3. **Project Experience:** What projects have you worked on in the past that relate to environmental science or data analysis? Could you share a specific example and your role in it?
4. **Interest in Environmental Issues:** What particular environmental issues are you passionate about or have knowledge in, such as climate change, conservation, pollution, etc.?
5. **Cultural Perspectives:** How does your cultural background or personal experiences influence your perspective on environmental issues? This question is particularly relevant for participants who are Native American or from diverse cultural backgrounds.
6. **Team Role Preference:** Considering your skills and experiences, what role do you see yourself playing in a team? For example, are you more of a data analyst, a project manager, a researcher, etc.?
7. **Skill Proficiency Self-Assessment:** On a scale from 1 to 10, how would you rate your proficiency in key skills you mentioned? For instance, if you're skilled in Python, how proficient are you?
8. **Learning Interests:** Are there specific skills or areas within environmental data science you are looking to learn more about or improve during this hackathon?

Create a slide and introduce yourselves! :)

Nate Quarderer (Earth Lab; ESIIL - Team B Mentor; https://nquarder.github.io/)

1. Intro - Nate Quarderer. I'm currently living in Arvada, CO (USA). I spent most of my time prior to coming to CO in Iowa where I grew up and went to college. I studied physics (BS), civil/env engineering (MS), teaching/learning (PhD) at the University of Iowa. I spent 10 yrs teaching math/science at Northeast Iowa Community College before coming to CU Boulder for my postdoc. I'm currently Director of Education at Earth Lab and ESIIL
2. Contribution - Team mentor; I'm here to help make sure that the team dynamic is healthy and that everyone is able to contribute in a meaningful way; I won't be a ton of help when it comes to the data science piece but we have lots of others who will be able to contribute

Choose 2

1. Background - See above, Intro.
2. Skills - Python (4/10); R (5/10); GitHub (4/10)

Eligio Maure (Navagis, UTC +9)

1. Intro: Elígio Maúre originally from Maputo (Mozambique) currently in Japan.
2. Team Contribution: Proficient with Python, particularly in processing/analysis of remote sensing data. Have applied remote sensing data to coastal eutrophication monitoring in Google Earth Engine (GEE) App

Choose 2

1. Background: Ph.D environmental studies (Oceanography), Nagoya University
2. Project Experience: Coastal eutrophication monitoring with satellite imagery
3. Skill Proficiency Self-Assessment: Remote Sensing, Python, GEE
4. Learning Interests: Use of AI/ML in environmental data science

Rieke Schäfer (time: UTC+1)

1. PhD candidate at PTB and GEOMAR in Germany, mostly around seawater pH and metrology in oceanography
2. I’ve been working a little bit with data in R and Python but mostly smaller datasets; I’m volunteering for Climatematch but not in the curriculum; I have some knowledge about oceanography and I have worked with ornithologists in the past, so I know some things about birds

4. Interest in environmental issues: Due to my work, I’m mostly familiar with ocean acidification

6. Team role preference: Probably researcher (literature search, do we something similar in our data, …) + making nice figures

Lise St. Denis (CIRES, Earth Lab)

1. Intro: I am a research scientist in Earth Lab. My background is in art, CS and crisis informatics. I work on tools and techniques for mining observations from the ground during disasters (e.g. social media and incident reporting). I've worked extensively with incident management teams in the us, primarily wildfire, currently work with industry partner and USFS.

2. I am proficient in python, data wrangling/plotting, and some deep learning skills as well.
3. I'd like to improve my proficiency with geospatial data.
4. I'm happy to play whatever role makes sense on the team.

Chandra Earl (NEON Biorepository)

1. Hi all, I'm Chandra and currently based in Honolulu, HI. I'm primarily a biodiversity data scientist and work with biological data in a big way, from analyses to data management. BS in Biotechnology/Bioinformatics, PhD in Genetics and Genomics from the University of Florida.
2. I'm familiar with biological big data (which uses environmental data tangentially) and with the ways it is used in AI/machine learning. I'm also fluent in Python/R and I know the biodiversity/genetic repos (ie GBIF, BOLD, GenBank, OBIS) like the back of my hand. I'm also familiar with general modelling (regression, CNNs, etc)

Choose 2

1. **Project Experience** - I've got various research projects right now across the biological realm: 1. Modelling chirality across mollusc species 2. Comparative evolution of moth eye spots and owl eyes 3. Matrix population models of captively reared snails 4. Gene expression analyses of diurnality in moths 5. Environmental niche characterization of a native Hawaiian snail species.
2. **Learning Interests** - While I use env data in some ways (mostly as predictors for species ranges), I don't really have a background in env science or ecology and don't know what kinds of questions are being asked or what data is available or how that data is used. I've recently started a job with the NEON biorepository as their data manager/developer so I'm interested in how people are using both NEON ecological and biodiversity data. Hope to be able to think of ways to use both here!

Jamal Sheriff

1. Personal Introduction
    a. Hi! I'm Jamal Sheriff. I am a PhD student at the Univ. of Illinois - Chicago. I'm a microbial ecologist studying the microbial dynamics of biological soil crusts within temperate biomes, particularly coastal dunes. As my graduation date has slowly started approaching, I find myself interested in pursuing a career in data science following my time at UIC. I have little experience with handling env. Data, machine learning, and AI, and I thought this hackathon would be a great way to get an introduction.
2. Team Contribution
    a. Most of what I've learned here over the course of the past few weeks have been new to me, but I would like to consider myself very much above-average with my R coding skills. I think that would be my best contribution to the project.
3. Specific Skills
    a. Statistics, Command Line, and R
4. Interest in Environmental Issues
    a. Effects of climate change on low-income communities; predictive modeling of fire risk for low-income communities