#### MICHIGAN STATE UNIVERSITY

## **Alpha Presentation**

Machine Learning for Optimization of Carbon Removal

#### The Capstone Experience

#### Team Anthropocene Institute

Edie Haase Jack Holscher Ishita Kokil

Nick Wang Hemanth Yalamanchili

Department of Computer Science and Engineering Michigan State University

Fall 2023



From Students... ...to Professionals

# System Architecture



The Capstone Experience

#### **Project Overview**

The removal of carbon dioxide is vital.
"Carbon Mapp" is a web app that informs the public and guides investors.
Carbon Mapp displays interactive heat maps to do so.

# Landing Page

Anthropocene Institute

Home About FAQ Data Articles

#### Climate Solutions - Optimized

We provide companies and agencies with the artificial intelligence tools necessary for completing their sustainability projects in the most efficient way possible.

#### **Optimization Tools**

# **DAC** Map





### **About Page**

Anthropocene Institute

Hitme About FAQ Data Articles

#### About Us

We are a group of Michigan State Students and made this website for our capstone project....

#### Our Team







Front End Developer

Nick please fill in some text about you here if you want

wangnich@msu.edu

Linkedin



# **Articles Page**

#### Anthropocene Institute





Home About May Data Aracias



Direct Air Capture - Learn Morel

Algae Blooms - Learn More!

Reforestation - Learn More!







# FAQ Page

and the second second	the second second		Contraction Maria	
Ant	nror	ocene	INSTR	ute

Home About FAQ Data Articles

V

^

FAQs

#### What is the Anthropocene Institute and what do they do?

Anthropocene Institute is an organization founded by Carl Page2012 and is focused on making Earth sustainable by knowing and investingin the right technology, they partner with entrepreneurs, investors, governments, non-profits, and universities to foster science, influence policy, promote sustainability, clean energy, and more:

Why Carbon Dioxide removal?	^

How was Carbon Mapp developed?

### What's left to do?

- Implement heat maps for the other methods.
  - Gathering remaining data, creating/training the models, connecting data to the front end.
- Apply real data to the heat maps.
- Add remaining content to all pages.
- Refine and polish everything.

### **Questions?**

