

Proposal: Free-drawn polygon using Mapbox

We are looking for a group of high energy students passionate about climate change that want to make an impact on the world.

Company Background

Perennial (www.perennial.earth) is a research and technology company developing innovative methods to incentivize and scale the adoption of regenerative agriculture programs. Based in Boulder, Colorado USA, the company has been working for multiple years to commercialize ongoing research in data-driven modeling and land remote sensing for scalable, robust digital soil mapping (DSM) carbon quantification. Perennial has received public and private funding to provide efficient, accurate, low-cost carbon measurement technologies and powerful digital tools for agricultural carbon projects, and is trusted by companies, farms, and organizations throughout the United States. Perennial's industry-leading technology has been recognized by TIME, Forbes, NASA, and Fast Company.

Project Summary

Perennial customers (Project Developers) in the carbon market are required to perform a clean up of those fields that they want to enroll. Cleaning up the fields involves first utilizing drawing features to create polygons that reflect the area planted or operated by the farmer. After creating the polygon Perennial utilizes masks detection algorithms to create masks inside a polygon. This projects involves understanding how the Mapbox features (`mapbox-gl-draw`) work and how to implement it in a frontend build on React. The feature would have to be built in a modular way that can be ported and utilized inside Perennial's Platform.

The Team

Preferred Time Size 2-3

Location

Remote

Intellectual Property

- Each team member will be asked to sign an NDA with JD Carluccio and Perennial.
- Perennial would require that the project and all parts be assigned to and owned by the company

Student Benefit

- Opportunity to work on the development of a geospatial product in a very nascent and fast growing field (geospatial engineering)
- Learn to utilize Mapbox, main geospatial drawing tool utilized by geospatial tech companies
- Positively impact climate change by working on something that matters
- Potential future internship opportunities available

Useful Skills/Software

Min Requirements:

- Javascript, React experience
- Exposure to Geospatial data
- Exposure to RESTful HTTP APIs
- Exposure to Git VCS

Skills Gained through this Project:

- Geospatial data processing & rendering
 - Experience working with Mapbox, raster.io, and similar technologies.

Contact Information

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