Agricultural Mapping Project: Ranch GIS System Development

Project Summary

- **Organization:** GoodFarms LLC
- **Project Type:** GIS / Spatial Data Mapping
- **Compensation:** $20 per hour
- **Estimated Time Commitment:** 80–120 hours
- **Location:** Primarily remote, with optional field visits
- **Student Profile:** Students interested in spatial data, mapping tools, agriculture, environmental systems, or technical problem-solving

Organization

GoodFarms is a berry production and commercialization company operating across California and Mexico, dedicated to improving lives from farm to table. Our work focuses on producing high-quality berries while investing in technology, data systems, and operational innovation.

As part of this effort, we are working to standardize and digitize ranch maps across our operations to support field organization, research plots, and internal planning.

We are seeking a Cal Poly student interested in geospatial tools and problem-solving to help build a structured ranch mapping system. This opportunity is suitable for students interested in mapping, spatial data, agriculture, environmental systems, or technical problem-solving, and who are comfortable learning and working with digital tools.

Project Objective

The objective of this project is to **build standardized digital ranch maps** that our team can use for operational planning, research plots, and internal visualization.

The student will help design and implement a mapping structure using GIS tools and convert existing ranch maps into a consistent digital format.

Scope of Work

The student will develop the initial set of digital ranch maps and establish a structured GIS mapping system. The project includes mapping approximately 15 ranches and designing a repeatable structure that can support additional ranches and regular updates and replants.

Responsibilities include:
- Digitizing ranch boundaries and internal field blocks.
- Creating spatial layers such as roads, irrigation infrastructure, and operational blocks.
- Mapping research and test plots.
- Organizing spatial layers and attributes in a consistent data structure.
- Standardizing map formats across ranches and producing exportable maps for operational use.

- Defining a simple GIS structure (layers, naming conventions, and attributes) that can be maintained and updated internally.
- Developing a repeatable workflow for adding future ranch maps.

The student will work with GIS tools selected based on the most practical long-term solution for the project.

The work will be conducted independently with periodic coordination and guidance from our team.

Deliverables

The project should produce:
- A standardized digital structure for ranch maps
- GIS maps for approximately 15 ranches
- Organized spatial layers (fields, infrastructure, roads, research plots, etc.)
- Basic documentation so our team can maintain and update the maps

Time Commitment

- **Compensation:** This is a paid hourly project. $20/hour
- **Estimated workload:** Approximately 80–120 hours total, depending on the availability and format of existing ranch maps.

Work will be conducted remotely primarily, though occasional visits to ranch locations may be helpful for field verification. If needed, the company will coordinate transportation, so a personal vehicle is not required.

Student Profile

We are looking for a student who enjoys working with spatial information, digital tools, and practical problem-solving.

Strong candidates will demonstrate:
- Comfort working with mapping or GIS tools
- Strong organizational skills when working with structured data
- Ability to design simple systems and workflows, not only complete individual tasks
- Interest in agriculture, land management, environmental systems, or spatial data
- Ability to work independently while coordinating periodically with a team
- Curiosity and initiative when learning new tools or software

Contact

Students interested in this opportunity are welcome to reach out:

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Improving Lives from Farm to Table