



# [AgriTech, Satellite x Al] Research Scientist

Global team, Flex work, new grads welcome

## 募集職種

### 人材紹介会社

ユナイテッドワールド株式会社

### 求人ID

1536021

### 業種

その他(IT・インターネット・ゲーム)

#### 会社の種類

中小企業 (従業員300名以下)

#### 外国人の割合

外国人 半数

### 雇用形態

正社員

#### 勤務地

東京都 23区

### 給与

400万円~900万円

### 更新日

2025年04月30日 12:47

## 応募必要条件

## キャリアレベル

新卒・未経験者レベル

### 英語レベル

ビジネス会話レベル (英語使用比率: 75%程度)

# 日本語レベル

基礎会話レベル

## 最終学歴

大学院卒: 修士号/博士号

# 現在のビザ

日本での就労許可が必要です

# 募集要項

This is an AgriTech startup aiming to solve agricultural and environmental challenges by combining satellite data (SATELLITE), machine learning (AI), and land parceling technology (GRID).

By providing innovative solutions that support the efficient management and utilization of farmland, they strive to enhance agricultural productivity and improve the quality of life for farmers not only in Japan but around the world. At the same time, they are also addressing global issues such as food security and climate change.

Currently, they have local subsidiaries in India and Singapore, and they are expanding their business into emerging markets across diverse regions, including Thailand, India, and Kenya.

## [Back ground of requruiting]

The farming application "Sagri" visualizes soil conditions of farmland analyzed by satellite data, helping farmers reduce

fertilizer use and contribute to mitigating global warming. This development is supported by the Ministry of Agriculture, Forestry and Fisheries of Japan.

When using fertilizers in agriculture, farmers typically rely on intuition to determine where, how much, and what type of fertilizer to apply. This can lead to excessive use, increasing costs and leaving unabsorbed fertilizer in the soil, which contributes to global warming. Soil testing involves labor-intensive processes of soil collection and laboratory analysis.

The app develops AI models to analyze soil components from satellite images, allowing farmers to easily view field conditions on a map. This application helps farmers quickly understand the optimal type and amount of fertilizer to use for each plot.

Reducing chemical fertilizers decreases CO2 emissions and creates carbon credits. While the impact of carbon credits on farmer profits is about 2% in Japan, it can be around 15% in emerging countries, significantly improving farmers' revenues. Sagri aims to enhance the income of farmers in developing countries through extensive use of satellite data.

#### ◆ Specific Job Responsibilities

- · Collect data on crop, soil, and greenhouse gas emissions domestically and internationally (mainly overseas) in cooperation with local fieldwork teams
- · Organize and preprocess data to make it ready for training machine learning models and calibrating process-based models.
- · Handle individual PoC projects with responsibilities for data collection, analysis, paper writing, and patent applications under mentor guidance.

### ◆ Their Development Environment

They already have multiple products with significant growth potential, and the scope of development themes is broad. Even in unfamiliar areas, you can take on challenges if you are motivated.

### <Technologies>

Languages: TypeScript / Python / Rust Architecture: Redux / Atomic Design

Libraries/Frameworks: React.js / Next.js / Django REST framework

DB: PostgreSQL (PostGIS)

Infrastructure: AWS (EC2 / EKS / S3 / RDS, etc.)

Version Control: Git Repository

Management: GitHub

Communication Tools: Slack / Zoom / Discord / Google meet

### # Culture

### ◆ About the Department

Department: Engineering Dept. Members: 11 full-time employees Supervisor: CRO Tanaka

### ◆ Department Culture

It is a private company, but they offer an environment where you can engage in research activities alongside your duties. You can continue your career in writing papers, attending conferences, and participating in academic societies. Depending on your achievements and suitability, we can consider arrangements where you remain affiliated with a university or research institution while working with them (such as contracting or joint research). They welcome individuals who wish to build their careers in academia or research institutions in the future.

# スキル・資格

### [Requirements]

- · Proven research achievements using mathematical modeling, statistical analysis, and machine learning.
- · Development of machine learning and statistical models.
- · Fieldwork experience in agriculture or environmental sectors.
- · Ability to write peer-reviewed papers independently (PhD).
- Proficiency in presenting research in English (communication with international business units, reviewing, and writing academic papers).

### [Preferred Experience/Skills]

· Holding a PhD.

## [Who They Want to Work With]

- · Shares their vision, mission, and values.
- · Proactively collaborates with universities and research institutions.
- · Challenges themselves to develop future-oriented products that solve social issues.
- Expands their work scope beyond their specialty and continuously catches up with new technologies.
- · Values team communication and information sharing, with a high willingness to learn new skills.
- · Listens sincerely to customer feedback and responds proactively.
- $\boldsymbol{\cdot}$  Enjoys working in a fast-paced environment and embraces significant changes.