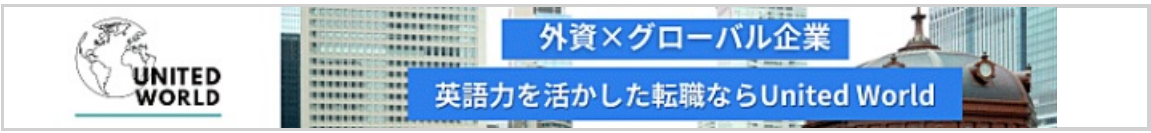
CareerCross by JAC Recruitment



[AgriTech, Satellite x AI] Software Engineer

Global team, Flex&remote work available

Job Information

Recruiter
United World Inc

Job ID
1536021

Industry
Other (IT, Internet, Gaming)

Company Type
Small/Medium Company (300 employees or less)

Non-Japanese Ratio
About half Japanese

Job Type
Permanent Full-time

Location
Tokyo - 23 Wards

Salary
4 million yen ~ 9 million yen

Refreshed
April 30th, 2025 12:47

General Requirements

Career Level
Entry Level

Minimum English Level
Business Level (Amount Used: English usage about 75%)

Minimum Japanese Level
Basic

Minimum Education Level
Post Grad Degree (PHD/MBA etc)

Visa Status
Permission to work in Japan required

Job Description

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.

Required Skills

[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.
・Enjoys working in a fast-paced environment and embraces significant changes.

Company Description