<u>Software Architect</u>

Job ID	2348
Contract Type	Permanent
Location	Tokyo
Apply from	Overseas OK (Relocate to Japan)
Work type	Hybrid
Japanese Level	Not required
English Level	Business
Salary	Yearly JPY 5.0 M to JPY 8.0 M
Skills	Python, C++
About the company	**Synthetic Data for Perspective** We provide one-stop solutions, using geospatial data from its own SAR satellites in line with its mission to create a progressive world based on real data. We are building a constellation of our own small SAR satellites to provide data and analytic information to governments and commercial entities. We are the only company in the world with the capabilities to both develop and operate its own satellites and provide analytics solutions. We offer subscription-based solutions and new solution development with collaborative prototyping: • Infrastructure development • Energy and natural resources development • Disaster risk management We have already successfully launched two satellites, and are aiming to launch six satellites by 2023 and a constellation of 30 satellites around 2026. According to our calculations, if we can operate 30 small SAR satellites, we will be able to acquire and analyze local ground data within two hours of a disaster anywhere in the world, and provide information that will contribute to decision-making in disaster response. Even if an earthquake, flood or other disaster occurs during the nighttime and it is difficult for people to enter the area, we will be able to quickly observe and confirm the situation. **Our CREDO:** • **Synergy of Spirit:** We embark on this journey together, bringing with us our combined experiences and life. As a team, we recognize that the team's goals are also personal goals, and personal goals are the team's goals. We each share a part of the responsibility to succeed. • **Synthesis of Knowledge:** We try to create new value under conditions that have huge uncertainty and volatility. The only way for us to succeed is to progress through trial and error that we learn from and make changes based on our new knowledge. **Synched with the Future:** We have an obligation to create a sustainable future for the next generations. To do so, we must tackle tough challenges as pioneers, leaving our comfort zones that prevent our growth.
Roles and Responsibility	We are one of the leading companies in the field of Synthetic Aperture Radar (SAR) satellite data acquisition and processing.We are expecting to have a fast growing number of satellites, and thus our processing capacity needs to scale along with them. We are looking for an experienced and talented Software Architect to join our SAR Data Processing team and tackle the system design of the processing pipeline that turns the SAR satellite raw data into higher level SAR data products.

	Responsibility As a Software Architect, you will be responsible for designing and overseeing the implementation of the system that processes large volumes of SAR satellite images. You will work closely together with other software developers, and people with SAR, physics and electronics background to ensure that the software meets the functional and non-functional requirements of the project. You will also provide technical guidance and coaching to the development team and ensure the quality and performance of the software products. **Details of work** • Develop technical specifications and documentation for the software systems • Lead design and implementation of the next generation data processing pipeline • Interface with other subsystems, such as the Ground Segment infrastructure and data delivery platform • Oversee the progress and quality of the development team and ensure the consistency with the initial design while also staying flexible for unexpected requirements • Provide technical guidance and coaching to the development team and resolve any technical issues or challenges • Evaluate and recommend new technologies and tools to improve the software development process and data products **Selling points of this role** • Experience an entire data product life cycle as we develops and operates ground systems as well, designs and manufactures satellites, and contacts with end-users of the satellite data • Cross-functional collaboration: Work alongside experts from various disciplines such as aerospace engineering, radar engineering, digital signal processing, software engineering, among others. • Participate in the stage of scaling our system from a few to dozens of satellites in space • Work with direct feedback from other parts of ground system to operate satellite, system operators, and the end-users of SAR satellite image
Minimum Qualification	- Can work in office in Tokyo - Excellent knowledge of software and application design and architecture principles and patterns - Familiarity with cloud computing and big data technologies and platforms - Experience in software development in Python and C++ - Experience with software testing (unit testing, integration testing, system testing). - Good verbal and written English language skills
Preferred Qualification	- Excellent project portfolio - Familiarity with signal processing and/or image data processing tools and methodologies - Contributions to open source projects (such as rasterio, gdal, opencv or other image processing library) - Experience working with satellites or space systems - Familiarity with Geographic Information Systems (GIS) tools and methodologies
Conditions/ Benefits	**Employment system:** Permanent **Location:** Kiyosumi Shirakawa, Tokyo **Annual Salary:** 5M ~ 8M JPY • Based on experience, ability, and previous work experience

	• Personnel evaluation system every 6 months
	Hours: Flextime system
	• Core time from 11:00 - 15:00
	• 2 days off a week (weekends) including Japanese public holidays
	• 10 days of paid time leave granted first year with an increment of 1 day every following year (ex. 11 days in the second year) up to a maximum in accordance with Japan's labor laws.
	Probation: 3 months
	Benefits:
	• Language learning support (Up to 30,000 yen /month)
	• Employee stock option
	• Job-related learning expenses covered
	• Side business allowed
	• Social insurance and annual medical check
	• Maternity and childcare leave
	• No dress code
	• No smoking on the premises (outdoor or indoor smoking areas available)
Interview Process	1. Application Screening
	2. 1st Interview
	3. 2nd Interview
	4. 3rd Interview
	5. Offer
	※ This process is subject to change.
How to Apply	Please send your resume and a cover letter detailing why you believe you are a strong fit for this position to asif.matservices@gmail.com