

Data Scientist

About Us

We are a fast-growing, Series A NatureTech company (backed by leading investors AzureX Space Ventures, Equinor Ventures, and Intercontinental Exchange) on a mission to enable zero deforestation and degradation and support mass forest restoration by producing the highest-quality nature mapping data and insights products.

Data is at the heart of Space Intelligence. We process large volumes of satellite data and analyse it within a machine learning framework to produce valuable nature mapping products for our clients.

Our products are trusted by the developers and investors in nature-based solutions, including Apple, Climate Asset Management, Everland, and WCS. They are also used to support the validation of compliance with the EU Deforestation Regulation (EUDR) through our partnership with ICE's Commodity Traceability Service (COT).

We are a group of passionate, dedicated individuals with deep technical and scientific knowledge necessary for producing reliable, high-quality data and insights. We have a strong understanding of our customers' needs and develop long-term relationships that add value.

We are a values-driven organisation, embodying these principles in our daily work: we are **Science-driven**, with a **Commitment to Quality**, always **Acting with Integrity**. We have a focus on **Innovation** to create better products for our clients and an overall commitment to **Equality**. We are striving to create a commercial culture that is meritocratic and outcome-oriented.

About the role

This position is part of our Science team. The key focus of this role is to produce satellite-based maps with the aim of saving/restoring forests! The main role of the Data Scientist will be to create high quality training data, analyse satellite data and apply machine learning methods to lead the production of maps of landcover and/or forest carbon storage; lead the communication of results and challenges internally as well as externally; lead the process of finding solutions to problems; and work on improvements to our methodologies. This will be done working as part of small interdisciplinary teams (pods) in a fast-paced environment, reporting to one of our Senior Mapping Scientists.

Main responsibilities

- Lead the creation of satellite-based maps, interpret them and present results, specifically:
 - Create high quality samples for model training by:
 - Using your expertise to know which remote sensing datasets are likely to be most useful for polygon selection, or what pre-processing is needed for carbon map training (GEDI LiDAR data), then lead the process of collecting, processing and analysing these data
 - Help ecologists delineate sample areas for Habitat Mapper for calibration and validation
 - Conduct experiments and pre-processing for GEDI data for Carbon Mapper
 - Use your expertise to decide which remote sensing datasets are ideal for the mapping problem (area, year) at hand, and lead the creation of seamless high quality EO datasets
 - Select appropriate machine learning methods, and use them to train models that capture relationships between remote sensing data and specific land characteristics
 - Initialise and maintain cloud computing environment, ensuring optimal use of cloud resources
 - Critically analyse results, identify problems and implement solutions to improve the performance of the models and the accuracy of the maps
 - Lead the the generation of reports, via summarising map data in an interpretable format and presenting map outputs in publishable quality
- Report to the pod lead, both general progress as well as possible areas of concern or of opportunity
- Provide on-the-job training to Data Analysts, so your knowledge and experience can be used to improve the skills of less experienced members of the team
- Communicate with and present results to clients

Additional responsibilities

- Use technical knowledge to find solutions to bespoke problems
- Collaborate with the engineering team to produce and maintain code. Improve modelling and mapping pipelines
- Collaborate with the Research team to participate in R&D projects. Help develop new products and lead small projects independently
- Direct and evaluate scientific solutions
- Contribute to white papers, scientific publications and/or blog posts

Key Qualifications and Requirements

- Bachelor's degree in a physical science or computing subject, with a 2:1 or higher, or equivalent work experience

- MSc or equivalent experience [e.g. ~2 years gaining experience as a Data Analyst]
- Experience with or interest in data science, statistics or machine learning
- Knowledge of the theory of satellite remote sensing and spatial data analysis, gained, for example, through a University course or experience gained during ~2 years as a Data Analyst
- Experience with GIS software (e.g. QGIS)
- Knowledge of / analysis experience with data pertaining to forest ecosystems and/or land surface processes.

Programming experience

- At least 2 years experience coding using python - where during the 2 years coding was a major part of your job or University course
- Experience using github or another version control system
- Experience using cloud computing services like AWS or Azure

General background and interests

- Scientific mindset – you're able to create hypotheses and experiments to test them, as well as recording and sharing your findings in a concise manner.
- Enjoy working in small multidisciplinary teams
- Strong ability to prioritise and focus

Salary

Starting salary £36,000 – £38,800. Placing depends on experience/qualifications. Pro rata, if part time.

Working for Space Intelligence

At Space Intelligence, we offer a competitive salary and benefits – 33 holiday days per year, an extra day off for your birthday, a good pension plan offering salary sacrifice for tax efficiency, an Employee Savings on Purchases Platform and an Employee Assistance Programme, as well as other benefits. We have a friendly, fun and supportive workplace, and we strongly value work-life balance. We are emphatically not a company with a long-hours culture, we are family-friendly and support flexible working and part-time, where possible. We also schedule a range of events including lunches, escape rooms, pub trips, crazy golf, bowling and much more. In addition, we do company and team away days.

We are, proudly, a diverse, multicultural team and our employees come from 11 different countries.

Where will I work?



We are looking for a candidate who will be based in our office on George Street, Edinburgh. Most of our team are in the office most days, and we feel you will learn fastest if you are in the office most days too. However, we support hybrid working and would be happy for you to work 1-2 days a week from home.

How to apply

Please send your CV and a cover letter explaining why you're particularly suited for this role to careers@space-intelligence.com

If you have work you can share eg GitHub profile, scientific papers then please include too. If you can't share due to confidentiality reasons, please explain that in your cover letter.

Please note, that if you don't currently have the right to work in the UK, we do not sponsor visas so please check out the UK Government website for further information about visas before applying.

Closing date: Monday 30th September, 5pm.