



Job Title: Data Scientist - Acoustic Monitoring

Rainforest Connection and Arbimon form a dedicated global team that leverages technology to safeguard the world's invaluable ecosystems and biodiversity. Our mission revolves around employing acoustic monitoring devices that actively listen to soundscapes in remote ecosystems, employing A.I. to convert these audio streams into a comprehensive and automated understanding of nature. As a team, we foster an open-minded, collaborative and agile environment, utilizing a modern tech stack and embracing the flexibility of remote work hours. If you possess a deep passion for data science and are captivated by the potential of acoustic monitoring to generate conservation insights, we eagerly await your application. Join our team and contribute to pioneering research and innovative solutions in the realms of acoustic monitoring and conservation.

Job Summary:

We are seeking an experienced, skilled and innovative Data Scientist to join our team and contribute to our acoustic monitoring initiatives. Your work will play a crucial role in advancing our understanding of acoustic environments and their ecological implications worldwide. *We are a fully remote and virtual team so you can work from anywhere for this role.*

Responsibilities:

- Clean, preprocess, and transform raw acoustic data for analysis, ensuring data quality and integrity.
- Develop and deploy deep learning and machine learning algorithms to analyze acoustic data collected from various sources, identify acoustic data patterns, trends, and anomalies.
- Collaborate with domain experts and researchers to define research questions and objectives related to acoustic monitoring.
- Develop innovative methodologies for feature extraction, signal processing, and classification of acoustic signals.
- Utilize data visualization techniques to effectively communicate complex acoustic patterns and insights to stakeholders.
- Collaborate with cross-functional teams (Science and Engineering) to integrate acoustic data analysis into existing systems or develop new tools and platforms.
- Stay updated with the latest advancements in acoustic monitoring technologies and methodologies, and proactively identify opportunities for improvement.
- Contribute to research publications, conference presentations, and grant proposals related to acoustic monitoring.



- Support the development of machine learning pipelines that automate preparation of datasets and training of models

Qualifications:

- Master's or Ph.D. degree in Data Science, Physics, Computer Science, Statistics, or a related field with a focus on acoustic signal processing.
- Knowledge of signal processing techniques and feature extraction methods specific to acoustic data.
- Strong experience in analyzing and interpreting large-scale acoustic datasets using statistical and A.I. techniques, including supervised and non-supervised machine learning algorithms.
- Proficiency in programming languages, especially Python for data manipulation, analysis, and modeling.
- Experience with developing and deploying deep learning audio classification models using Keras and Tensorflow.
- Basic knowledge on cloud services such as AWS.
- Experience with SQL to query data from databases.
- Strong problem-solving and analytical skills, with the ability to learn new skills and develop innovative approaches to address acoustic monitoring challenges.
- Excellent written and verbal communication skills to collaborate with cross-functional teams and effectively convey complex concepts to both technical and non-technical stakeholders.
- Teamwork skills with a collaborative mindset.
- Proven track record of research publications, conference presentations, or successful grant proposals in the field of acoustic monitoring is a plus.
- Knowledge or practical experience in Scrum or other Agile methods.
- Excellent organization skills and familiarity with source code management (Git/Github) and continuous integration
- Experience in working with environmental or ecological datasets is desirable.

Benefits

- **Meaningful Impact:** By joining us in the early days of our startup, you will have abundant opportunities to contribute to the development of a new approach to automate the monitoring of biodiversity and ecosystem health at a global scale. Your work will have a tangible impact on shaping the future of our company and the industry as a whole.
- **Competitive Compensation and Equity:** We believe in recognizing and rewarding your expertise and contributions. We offer industry-competitive compensation packages that reflect your skills and experience.



- **Autonomy and Trust:** We value your skills and expertise and strive to foster a culture of trust and autonomy. We want to provide you with the freedom to do your best work, allowing you to take ownership of projects and make a real difference. Your ideas and opinions will be valued and respected, empowering you to innovate and excel.
- **Dynamic and Diverse Team:** You will work with a talented, passionate, and diverse team of smart individuals who are deeply committed to our mission. We believe that a vibrant and inclusive work environment fosters creativity and collaboration, leading to better outcomes. Together, we will tackle exciting challenges and create a positive impact.
- **Remote-First Company:** We embrace a remote-first work culture, recognizing its value and flexibility. You will have the freedom to work from a location that suits your needs while staying connected with the team through advanced collaboration tools and communication channels. We prioritize work-life balance and support your well-being.

Join us on this exciting journey and be part of shaping a new frontier in our industry. Together, we will create positive change, unlock nature's potential, and achieve remarkable outcomes.

To Apply

We are a diverse and inclusive remote-first team that values individuals from various backgrounds. We encourage applicants to apply, even if they feel they may have areas for development or do not meet all the criteria. As an equal opportunity employer, we consider all applicants without discrimination based on age, ethnicity, religion, sex, sexual orientation, gender identity, family or parental status, national origin, veteran status, neurodiversity, disability status, or any other protected characteristic. We are committed to fostering a supportive and inclusive environment where everyone has the opportunity to thrive and contribute their unique skills and perspectives. Join us in creating a diverse team that reflects our customers and communities and where diversity, equality, and inclusion are fundamental principles.

Please submit your resume, cover letter, and any relevant portfolio or research publications demonstrating your expertise in acoustic data analysis to contact@rfcx.org with the subject **“Position: Data Scientist”** and tell us a bit about yourself.