Conservation Tech startup seeks

Computer Vision Engineer (5mo. contract)

for exciting underwater video analysis software for sustainable oceans

Quick Summary

- Full or part-time (0.7 FTE minimum)
- Duration: 1st April 2024 – 30th August 2024 (5 month contract)
- Location: in-person in London OR remote with monthly in-person visits to London.
- Must have right to work in the UK. We cannot sponsor visas at this time.
- Salary: £77,000 annual, pro rata.
- We are open to working with contractors/freelancers, but due to the nature of our funding, this role must be hired for as a member of our staff for the 5 month duration of the contract.
- **To apply: send CV, cover letter and work examples to enquiries@sntech.co.uk with subject '[SEAFRAME] Computer Vision Engineer (5 month contract) Application'.**

Overview: Full- or part- time Computer Vision Engineer at SafetyNet Technologies

We are looking for a smart and dedicated Computer Vision Engineer to join our team for a short project. You want to put your passion for computer vision and machine learning to create impactful products for humans and the ocean environment. You want to work at an award-winning conservation technology company that is making a difference in the oceans and you want to work with similarly generous and diverse people that put engineering, design, science, business and innovation together to solve intractable conservation challenges.

About Us

SafetyNet Technologies (SNTech) takes a user-centred design approach to building smart solutions to overfishing and ocean conservation, backed by sound business models that help make the commercial fishing industry smarter and less wasteful. Based in Somerset House, we are a team of 10 designers, engineers, scientists and business specialists who have built strong links with the international commercial fishing industry, scientific community and regulatory bodies. There are solutions to the global overfishing problem and we aim to accelerate their discovery to enable maximum positive impact.

Why are we looking for you?

We've created an underwater camera that can make a real difference to sustainable fishing and biodiversity monitoring. Camera footage is viewed by fishing crews and scientists to improve their sustainability outcomes and track species behaviour. We are looking for a computer vision engineer to work with us to create computer vision pipelines that can help our users navigate overwhelming quantities of video data to find the insights they need. We need you to help us identify and explore a variety of computer vision techniques with our library of subsea footage. We are designing with extreme users in an extreme

environment, so you will be inventive, empathetic and work collaboratively with our team who have brought our existing marine products to market.

What is the job?

We need you to research, evaluate and implement a variety of computer vision approaches (both statistical and ML-based) for analysing large volumes of video data for features of interest that we have identified. We have a large volume of training and validation video data to work with, and hired help for labelling and cleaning this dataset. You will also be working with a full stack developer who is responsible for wrapping your work in a user interface that non-experts can use. Expect a real emphasis on computational efficiency. Whilst at sea where our products are used, there is rarely an internet connection to rely on cloud computing. We expect our models to be run locally, at the edge.

We need you to define an overall approach and architecture with us, then build pipelines that are testable and scalable to our needs. You will be implementing a build system to release code that is easy to update and maintainable. You will work closely with the product manager and full stack developer to identify priorities, schedule work and implement effective CV approaches, and a Video Annotator to be given great training datasets.

Responsibilities:

This is an engineering position, with a focus on computer vision and machine learning:

- Support the entire application lifecycle (concept, design, test, release, support).
- Give advice to other members of the team, especially concerning video data labelling.
- Writing code to produce fully functional computer vision pipelines and interface APIs.
- Troubleshoot, test and debug.

Skills:

Technical skills:

- Prior work with computer vision workflows for digitisation, counting and identification (for example object detection, segmentation and/or captioning).
- Experience in training, tuning, and implementing computer vision models.
- Proficiency in one or more programming languages that can be used to support the job's responsibilities (e.g. Python/Jupyter, Java, Scala) and skills in SQL, Docker, Google Colab. Proven ability to write maintainable code.
- Working understanding of Deep Learning frameworks such as PyTorch, Tensorflow.
- Experience of working with image composite and stitching related software.
- Experience of using object detection algorithms, models and frameworks.
- Demonstrable portfolio of previous relevant work, illustrating the above.

Collaborative skills:

- Demonstrable skill in communicating effectively - you are able to represent the opportunities and challenges of CV/ML development, whilst recognising the concerns and priorities of other disciplines (software development, project management etc.)
- Writing and being steered by user requirements, technical specifications, testing and quality considerations.
- Written skills to document your work, and verbal skills to engage with external parties.

- Ability to break down a complex task into smaller components and easily fit them back again into a bigger picture.

Location

You will be working either remotely or from our physical studio in Somerset House, London, UK, where you'll find our workspace, engineering workshops, and kitchen. You are also welcome to apply to this role as a fully remote applicant, with the expectation to visit the studio once every month for check-in meetings.

Extras

- Make a BIG social/environmental impact using your skills in an exciting startup
- 10 days holiday plus bank holidays.
- Health insurance and Cashback plan available
- Flexible working options (both location and times of day)
- Cycle to work scheme
- Sustainable holiday travel incentives
- Mental health first aiders across the company
- We are currently trialling a 4.5 day working week (ie. everyone has Friday afternoon off work except for emergencies) without loss of pay.

To Apply

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Equal opportunities

SafetyNet Technologies Ltd. (SNTech) is an equal opportunities employer, we recruit regardless of race, religion, gender, gender identity, sexual orientation, age or disability status and look to employ from a wide range of backgrounds and experiences.

Studies show that women do not apply for roles unless they meet 100% of the requirements, whereas men apply when they meet at least 60% of the requirements. So regardless of how you identify, please apply if this is a role that would make you excited to come in or log in to work every day.

To help us reduce bias, please do not include a photo in your CV or application.

We hope you consider joining us!