



Computer Vision Engineer

Fieldwork Robotics Ltd - Cambridge

About the role:

We are seeking to employ a talented, enthusiastic and suitably qualified Computer Vision Engineer to work on an active project for the development of a new autonomous robotics platform for agriculture. You will be responsible for data gathering and processing and development of machine learning algorithms for computer vision, as well as integrating them into our existing robotic platforms.

This represents a fantastic opportunity for skilled professionals to join one of the most excited brands in the robotics market. As a high growth company, roles do change and evolve, so you will be able to expand on your key duties within the role to help the team deliver their objectives.

Responsibilities include the following:

- Lead the work in training and validating computer vision models for the detection of soft fruit, to use on our harvesting robot.
- Manage the entire machine learning life-cycle: from working with our field test engineers for data collection, quality checking outsourced labelling, all the way to final algorithm integration on the FWR platform.
- Work with mechanical and electronic teams to ensure optimised integration with other system components and the manufacturing process. (Camera and lighting setup, etc.)
- Constantly monitor the performance of deployed models, and react quickly to degradations.
- Work at all stages of the system development cycle from concept and requirements capture through to transfer to production.

About you:

The ideal person will be passionate about training and refining high performance computer vision models, in a repeatable and structured way. They should enjoy the process of continuous improvement, and be proactive in automating as much of their workflow as possible.

Requirements:

- Degree or HNC/HND in data science, machine learning, computer science or equivalent.
- At least 2/3 years of work experience with computer vision, machine learning and deep learning.
- Experience of creating and maintaining versioned training, test, and validation dataset used for specific ML models.
- Knowledge of active lighting, and how cameras and lighting systems interact, to achieve high accuracy models in the dark.
- Proficiency in deep-learning based ML techniques for object detection and image segmentation.
- Advance knowledge of the Python language.
- Some experience of “classic” computer vision algorithms, and the ability to know when to use them instead of an ML based approach.
- Good problem solving, analytical and organisational skills and attention to detail.
- Good team working ethic but able to work on own initiative with minimum supervision.



Bonus

- Experience in embedded hardware for ML applications.
- Experience with multi-object tracking algorithms.
- Experience with noise reduction and filtering of object detections.
- Some experience of ROS (the robot operating system) and robotics.
- Comfortable with a version control system, ideally git.

About Fieldwork Robotics

We develop modular, multi-crop, soft and adaptive robots able to operate in non-controllable agricultural environments alongside people, on tasks such as selective harvesting of fruits and vegetables.

We provide leading edge robotics solutions focussed on the delivery of innovative technologies in a fast-paced environment. We develop advanced in-house software to control hardware (robotics and vision) for fruit harvesting and data collection to maximise the value to our clients.

Benefits

- Profit Sharing/Share Options
- Enhanced Pension
- Hybrid working
- On site parking
- Casual dress
- Social events