JOB DESCRIPTION.

FOTENIX

Role	**Computer Vision Engineer**	**Salary**	£30k - 40k
Location	Manchester, M6 6AJ (Hybrid + Flexible)	**Leave**	33 days

We're looking for a hands-on Computer Vision Engineer to join our ML-driven Agri-Tech team. You'll focus on building and deploying production computer vision pipelines that process multispectral imagery to monitor crop health, detect stress, and support yield prediction. This role suits someone who wants to take models from development through to reliable, scalable deployment on real-world agricultural systems.

RESPONSIBILITIES

Area	Tasks
Image Pipeline Development	Build and maintain production pipelines for ingesting, calibrating, and processing multispectral image data at scale. Implement efficient batch and streaming workflows for image pre-processing and quality assurance.
Model Deployment & Integration	Package trained computer vision models for deployment across edge and cloud environments. Integrate inference pipelines with the wider Automated Crop Scout platform and internal APIs.
Detection & Classification	Develop and optimise detection, segmentation, and classification systems for plant stress, disease, and growth-stage identification from multispectral imagery.
Vegetation Index Computation	Implement and optimise vegetation index calculations from raw spectral band data. Ensure accuracy and consistency of derived features across different sensor configurations and lighting conditions.
Edge & Embedded Inference	Optimise models for inference on edge devices deployed in commercial glasshouse and field environments. Profile and tune for latency, memory, and power constraints.
Testing, Monitoring & Reliability	Build test suites and monitoring for deployed vision pipelines. Track model performance in production, flag drift or degradation, and document system behaviour and failure modes clearly.

CORE COMPETENCIES

- Hands-on experience with computer vision libraries and frameworks (OpenCV, PyTorch, or TensorFlow)
- Proficiency in Python, with experience writing production-quality code beyond notebooks and prototypes
- Practical experience deploying ML models into production or staging environments
- Understanding of image processing fundamentals: filtering, calibration, registration, and geometric transforms
- Familiarity with containerisation (Docker) and CI/CD pipelines for ML systems
- Experience working with large image datasets and efficient data loading strategies
- Strong debugging and profiling skills for performance-critical applications
- Able to communicate technical trade-offs clearly to both engineering and non-technical colleagues

BONUS COMPETENCIES

- Experience with multispectral or hyperspectral imaging data
- Exposure to edge inference frameworks (ONNX Runtime, TensorRT, or OpenVINO)
- Familiarity with cloud infrastructure (AWS preferred) for model serving and data storage
- Understanding of MLOps tooling such as experiment tracking, model registries, and automated retraining workflows
- Prior experience with object detection or semantic segmentation architectures (YOLO, U-Net, Mask R-CNN)
- Background in agriculture, plant science, or environmental monitoring
- Experience working with embedded Linux systems or single-board computers

OUR VALUES

As an equal opportunity employer, we encourage individuals across any sexual orientation, race, religion, ethnicity, age, gender, neurodiversity, and/or disability to apply. Our ethos is to propagate creative talent, each individual provides a key facet to our culture.

We are aware of the pressures of today's lifestyle and operate flexible work times and locations to facilitate. Staff training programmes help you develop your future with high-performing but laid-back individuals. A constant supply of local coffee and tea and a collaborative music playlist set the scene for those Monday mornings.