JOB DESCRIPTION & PERSON SPECIFICATION

1. Job title: Senior UAV data analyst **Centre:** CCR **Grade:** Specialist **Location:** Cambridge	
Reports to (Job title)**:** Ji Zhou **Line Manages** (Job titles)**: Head of Data Sciences**	

2. Main purpose of role:

To develop and conduct cost-effective UAV phenotyping across NIAB together in collaboration with the Crop Characterisation teams.

To work on image-based phenotypic analysis using image analysis (e.g. OpenCV, Scikit-Image, VTK, Open3D) and machine learning (Scikit-Learn, Keras and TensorFlow) under Prof Ji Zhou's supervision

To develop commercial partnerships and working with NIAB Ventures explore options for commercial exploitation and development of NIAB IP.

To develop research funding in the area of Agri-Tech, robotics and automation applied to agricultural production.

3. Financial authority/responsibility (e.g. delegated budget, authorisation level, approx value of contracts etc**):**

Responsible for Agri-Tech, remote sensing, robotics and automation budgets.

4. Key relationships (external and internal)**:**

Develop relationships across NIAB, Cambridge Crop Science Centre.

Develop and strengthen relationships with funders and stakeholders- especially with relevant industry and the NIAB membership.

Tasks/responsibilities (in order of priority)	Approx % of time
To develop and conduct UAV phenotyping across NIAB together with Varieties & Seeds and other NIAB departments in Cambridge	30%
To work on image-based phenotypic analysis using image analysis and machine learning	30%
To develop commercial partnerships and working with NIAB Ventures explore options for commercial exploitation and development of NIAB IP.	20%
To develop research funding in the area of Agri-Tech, robotics and automation applied to agricultural production.	20%

6. Working conditions :

100% FTE, flexible working, at least two days at HQ in Cambridge as required

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7.   PERSON SPECIFICATION

Education/Qualifications:

Essential:	Desirable:
Degree/ PhD in computer science or similar	Degree/ PhD in computer vision or machine learning

Experience:

Essential:	Desirable:
Over 3 years in a research position in the area of crop phenotyping Strong track record of academic publications UAV-based phenotyping skills and image-based phenotypic analysis. Interpersonal and communication skills with NIAB staff at all levels and industrial partners	3D point cloud analysis, analytic algorithm design, machine learning

Specialist Training:

Essential:	Desirable:
Experience with UAV phenotyping (register pilot), remote sensing	Robotics and automation

Personal Qualities (skills, behaviours and competencies)

Essential:	Desirable:
Motivated, collaborative, open-minded and innovative	

Date of description:	**Compiled by:**