

Georgina Wager

Telephone: 07841 901 252 | E-mail: georgina_anna@outlook.com | Website: <https://georginaanna.github.io/>

Education & Qualifications

PhD, Elizabeth Creak Fellow: Economics of Precision Livestock Farming

- Includes video processing, computer vision to analyse frames and detect objects of interest, pose estimation using YOLOv8 and DeepLabCut and statistical analysis using R and Python.
- Elizabeth Creak Fellow
- Research aim is to predict individual feed intakes using behavioural analysis.
 - Potential Chapter: Methodology to capture video footage – can be used for researchers and developers to validate their data and presents an easy and affordable video recording system that is fully adaptable.
 - Potential Chapter: The development of an automated system for monitoring feeding behaviour at a feed trough and its importance as a welfare assessment tool.
 - Potential Chapter: Optimising foraging theory, does it apply to housed Bos taurus fed a total mixed ration.
 - Potential Chapter: The development of a feeding behaviour ethogram for practical use Or The detection of feeding behaviours in cattle implementation of current and future feeding ethograms.

MSc Data Science for Global Agriculture, Food and Environment

- Distinction
- Completed August 2021
- GitHub: <https://github.com/georginaanna>

Completed an “Engaging our Customers Remotely” Webinar Programme hosted by MTD Training Successfully completed the IOSH Managing Safely

BSc (Hons) Agriculture, Harper Adams University

- 2:1 BSc (Hons) Agriculture in July 2020
- Completed a research project into the effect of semen morphology on cow fertility.

3 A-levels in Biology, Chemistry and Maths Statistics 1 AS level in Geography

11 GCSEs Grade B or above including English and Maths

Experience

Harper Adams University. May 2021 – Continuous.

Data Scientist (part time)

- Tuberscan Project (Tuberscan: Using deep learning and data science to improve agronomy decisions in the potato industry)
- DSSAT (Completed the Crop modeling course in Georgia, USA)
- Data Analysis
- Assistant/Support Lecturer on Data Science Modules
- Researcher on Modern Slavery Grant - Research - [Critical evaluation of the utility of Modern Slavery Statements within the agri-food supply chain \(harper-adams.ac.uk\)](#)
- Published dataset in [Dryad](#), Data from: Investigating human repeatability of a computer vision-based task to identify meristems on a potato plant (Solanum tuberosum).
- Presenter [Harper Adams University R and Python users' groups](#) and [newer webpage](#) (topics covered below)
 - 2023-05-31 (meeting #122) Progress update on DeepLabCut (George W)
 - 2023-04-26 (meeting #118) Part 3: Animal pose and behaviour detection in Deeplabcut (George W)
 - 2022-04-13 (meeting #89) Reading and activity from 'Advanced R' Ch 03 (George Wager)
 - 2022-03-09 (meeting #84) Python computer vision: Yolov5, What is it good For!? (George Wager)
 - 2022-01-12 (meeting #77) Reproducible statistical report in R Markdown (George Wager)

Round Oak Electrical Ltd. April 2020 – Present.

Operations Manager (part time)

- Management of Certification (NICEIC, CHAS, ECA)
- Business development and analysis (turnover increase from 500k in 2021-22FY to 1.5million in 2023-24FY)
- Managed new branding and website design (New website: <https://www.roundoakelectrical.co.uk/>)
- Implemented new accounting and payroll systems to cut overhead costs and increase business versatility.

Promar International a subsidiary of Genus Breeding Ltd, Nantwich Cheshire. August 2019- July 2020.

Marketing Coordinator

- Built and monitored the rebranding of the Company's website through Wordpress
- Continued to optimise the website post-launch
- Reviewed and produced reports based on search engine optimisation, social media and website coverage
- Initiated and managed the Company's social media presence, updating it regularly with relevant blogs and articles
- Liaised with external companies to ensure the presentation of Promar International is correct
- Enhanced my knowledge of marketing laws (GDPR)
- Assisted in Promar's current development of DAL (Digital Asset Library)
- Maintained and developed the Promar webpage and social media platforms
- Set up google analytics tracking through Power BI

Honours and Awards

"Elizabeth Creak Fellow" at Harper Adams University, United Kingdom (April 2022 to Present).

The Harper Adams Club Postgraduate Scholarship (May 2021)

Clyde Higgs MSc Scholar (October 2020)

Scholarship from the Birmingham and Staffordshire Agricultural Society (April 2017)

Mercer Scholarship (April 2017)

Memberships

Member of the Global Institute for Agri-Tech Economics

Fellow of the Royal Statistics Society (FRSS)

Publications

Methodology for evaluating training data quality for computer vision tasks. (In Process)

Georgina A. Wager, Matthew Butler, Richard Green, Megan Lewis, Joseph K. Mhango, James M. Monaghan, and W. Edwin Harris

Video methodology for automated analysis of livestock feeding behaviour in indoor settings. (In Process)

G. Wager, M. Butler, W.E. Harris, M. Rutter, E. Bleach, J. McCaughern, and K. Behrendt

Other works

Tutorful. December 2018 – June 2021

- Mentored students in GCSE Chemistry, Biology, and Mathematics
- Adapted teaching methods to the learning requirements of each student

Genus Breeding Ltd. Nantwich, Cheshire. August 2018- August 2019

- Initiated the change in allocating customer credit, saving multiple teams within Genus PLC time
- Presented a critical data review on 'Beef Cornerstone' to the EMEA Beef Director
- Developed an automatic e-mail generator saving manual labour
- Worked with developers to make efficient changes to the database

J Minshalls, Camp Hill Farm and Nigel Adams. Farm Assistant on three separate farms, both livestock and arable. Involved:

- General herd health monitoring and cleanliness
- Milking 270 Holstein cows
- Worked with a team on a potato grader (Nigel Adams)

Harper Adams University, Biggin Hall Hotel, Jug & Glass Inn, Charles Cotton Hotel and Nandos

- Multiple roles including Waitress, Hotel cleaner and Front of House Operator.

References

Academic Reference:

Job Role: Professor Karl Behrendt

Location: Harper Adams University, Newport, Shropshire, TF10 8NB

Contact E-mail: kbehrendt@harper-adams.ac.uk

Current Employment Reference:

Name: Martin Williams

Job Role: Managing Director at Round Oak Electrical Ltd

Phone Number: 07789 220081

Previous Employment Reference:

Name: Neil Adams

Job Role: Managing Director at Promar International

Phone Number: 07866 363 123