Cefas is a world leader in marine science and technology, providing innovative solutions for the aquatic environment, biodiversity and food security. The Data Science and Systems team work with multiple teams across Cefas’ Science Directorate, providing statistical and modelling expertise, including the development of assessment tools. We work with a variety of data generated by experimental studies, research vessel surveys, monitoring programmes, model outputs and Earth observations, to deliver insightful analyses for UK government marine policy questions and international customers.

Working in the DSS team, the job-holder will provide technical support to current and future research programmes. You will be required to: provide statistical advice on scientific study design and assessments ensuring high data quality standards; extract, manipulate, visualise, analyse and model data to address research questions and support delivery on research projects; report results and contribute to contract reports and peer-review publications. With the team’s broad remit, you will have numerous opportunities to contribute to the wide range of scientific disciplines at Cefas while developing research-led methodologies to tackle real-world problems.

**MAIN DUTIES AND RESPONSIBILITIES**

You will provide statistical work and advice to a wide variety of fisheries and environmental research and monitoring programmes, collaborating with other teams to provide advice on analysis, study design and assessments.

You must have a strong understanding of modern statistical methods and the theory behind them, coupled with the ability to successfully interact with scientists working in the field and laboratory and explain statistical concepts to a range of audiences. You will be able to define how to approach an analysis, with the ability to provide innovative solutions to new questions. You must be flexible and capable of undertaking activities in
support of the Data Science and Systems team, including data processing, data mining and statistical analysis.
Duties will include:

- Independently leading the statistical analysis and modelling of fisheries and environmental datasets.
- Initiating, planning and leading statistics and/or data science research projects involving novel analytical approaches or applications
- Contributing to grant applications and developing external collaborations in statistical research
- Developing data analysis tools and study design methodologies on defined contracts and collaborating with scientists to advance UK marine assessments
- Preparing reports to meet customer deadlines and in support of evidence-based policy advice
- Producing peer-reviewed research publications and communicating research findings at conferences and symposia.

**EXPERIENCE/SKILLS**

- Strong knowledge of statistical theory and good mathematical abilities
- Extensive experience providing statistical advice and performing a wide range of analyses, ideally including Bayesian statistical modelling
- Demonstrable experience developing bespoke statistical approaches
- Track record of leading publications in peer-reviewed journals and/or delivering detailed project reports
- Highly computer literate with experience in handling and manipulating large datasets
- Excellent communication / presentation skills, attention to detail and time management with a proven ability to deliver to deadlines.

The following would also be advantageous:

- A basic understanding of, or interest in, biological systems and the marine environment
- Experience with Bayesian probabilistic programming using languages such as Stan, INLA, JAGS or WinBUGS
- Experience analysing data from Earth observation or geographic information system (GIS) and/or experience modelling spatially or temporally correlated data
- Project management experience demonstrating an ability to lead people and projects to successful delivery.

**Person specification**

Please show how your skills and experience would enable you to fulfil the requirements of the job description

**Qualifications**

MSc/PhD in statistics, mathematics or other numerate degree (or extensive relevant experience)
Behaviours

We'll assess you against these behaviours during the selection process:

- Seeing the Big Picture
- Delivering at Pace
- Making Effective Decisions
- Working Together

Technical skills

We'll assess you against these technical skills during the selection process:

- Statistical programming

Apply

https://www.civilservicejobs.service.gov.uk/csr/index.cgi?SID=b3duZXJ0eXBlPWZhaXImY3NvdXjJjZT1jc3FzZWVfY2gmdXNlcnNIYXjjaGNvbnRleHQ9NzMyMDgwMTEmam9ibGlzdF92aWV3X3ZhYz0xNjE5ODM1JnBhZ2VjbGFzcz1Kb2JzJm93bmVyPTUwNzAwMDAmcGFnZWFjdGlvbj12aWV3dmFjYnlqb2JsaXN0JnNlYXJjaF9zbGljZV9jdXJyZW50PTQmcmVxc2lnPTE1NTExNzE1MTctNjE3YTFhNmM2OWMxZmFjMTM5QwNTUwMjdjYjc0MjdzZyUx==