

Student Placement in 2017/2018

Computer Science and Wildlife Research

Background

The Game & Wildlife Conservation Trust is an independent wildlife conservation charity with its 60 scientists carrying out research into game, associated species and habitats, from its HQ at Fordingbridge, Hampshire, and at out-stations throughout the country. The Trust's main areas of interest encompass farmland, moorland, woodland and river management for game and other wildlife. All of these areas of research generate a great deal of data, which needs to be collected, stored, processed and analyzed.

The Placement

The placement will be split between the Trust's IT, Biometrics and GIS teams, liaising with other research staff as needed. These teams are responsible for the day-to-day operation of the IT systems within the Trust, managing the Trust's long-term research databases and carrying out data mapping and analyses.

Our 2017/2018 placement will be based at Fordingbridge. The successful candidate will apply IT solutions to a variety of wildlife research projects, involving database construction and design, scripting and application development. The database work will require SQL database upgrades and maintenance. In particular, the student will use their skills to allow for more efficient and modern data collection and analysis, including web-based data entry and helping to automate standard statistical analysis of long-term datasets. Additional projects undertaken by previous students have involved manipulating and displaying spatial information from satellite-tagged woodcock (<http://www.woodcockwatch.com>), while another developed a crowd-sourced method to identify species from camera trap photos.

The successful student needs to be familiar with:

1. Visual Basic for Applications (VBA)
2. PHP /ASP scripting
3. Relational database design, i.e. SQL
4. Python

The placement will provide real-life experience of applying their technological skills to solve a variety of practical problems and of working collaboratively with science professionals. The successful candidate will be expected to work to a high standard, with attention to detail being very important. The student must be self-motivated, able to work independently and have the ability to research and solve problems within a dynamic team whose members have a varied background.

Free accommodation is provided on-site at Fordingbridge in self-catering student accommodation, as well as a stipend of £100 per week to cover basic necessities. This is a great opportunity for a student to acquire a variety of skills that are increasingly desirable in the field of information technology and its application in a scientific/research environment, through exposure to a variety of research and IT projects. Former students have successfully pursued careers in Computer Science using both the technical and interpersonal skills acquired during their time at the GWCT.

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