**Georgina Milne**

**Education**

|  |  |  |  |
| --- | --- | --- | --- |
| **PhD Biological Sciences/Palaeoecology** | **Queen’s University, Belfast** | **September 2012** | **November 2015** |

*Environmental niche evolution and ancestral niche reconstruction*  
This project aims to develop a novel methodology for ancestral climatic niche reconstruction. By linking niche traits to the phylogenetic history of a clade, we can better understand the how species have responded to past climate change.  
**Ch1** In Prep “The impact of sample size and variable choice for generating models of the palaeo-climatic niche”

**Ch2** In Prep “Climate envelopes updated for the 21st Century; modern modelling tools improve the reliability of palaeo-climate reconstructions”

**Ch3** “Using historical biogeography to explain the modern diversity of the Hydroporus genus”  
**Ch4** “A novel method of ancestral niche reconstruction – integrating niche modelling, phylogenetics and fossil data”

|  |  |  |  |
| --- | --- | --- | --- |
| **Masters (Msc) Management** | **Queen’s University, Belfast** | **September 2009** | **September 2010** |

**Dissertation Topic:** “*Limiting factors of RFID update within small business.”*

This research investigated the technology behind RFID and its benefits and limitations to small businesses.  I prepared technical documentation, interviewed business owners and conducted an intensive statistical analysis of my findings.   
Other modules include business strategy, software, operations, marketing, finance and accounting.

|  |  |  |  |
| --- | --- | --- | --- |
| **MA Natural Sciences 2:1** | **University of Cambridge** | **September 2005** | **June 2009** |

**Dissertation Topic (now published)** “The influence of pigmentation patterning on bumblebee foraging from flowers of Antirrhinum majus.”

**Publications**

Whitney, H.M., **Milne, G.**, Rands, S.A., Vignolini, S., Martin, C., Glover, B.J., 2013. *The influence of pigmentation patterning on bumblebee foraging from flowers of Antirrhinum majus***.** Naturwissenschaften 100, 249–256.[undergraduate thesis]

**Employment History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Intermediate Software Developer** | **Citibank** | **December 2010** | **August 2012** |

As a software developer in the Global Data Mine team I worked on a multi-terabyte data warehouse which manages the aggregation and reporting of global foreign exchange (FX) data (i.e. currency trading). This technical role required software development skills, data analytics and understanding of the financial markets. The position demanded extensive knowledge of SQL/VBA/MDX and the entire suite of 2008 Microsoft data warehousing tools.

|  |  |  |  |
| --- | --- | --- | --- |
| **IT consultant/analyst** | **Deloitte** | **September 2009** | **December 2010** |

As I graduate analyst consultant I trained extensively in the basics of software development, project management and stakeholder engagement. Clients included the NHS and Invest NI, where I specifically assisted in the design, development and implementation of Cognos data warehouse solutions for data storage, aggregation and analytics. Technical skills for this role include MS-SQL /VBA/ HTML and also extensive knowledge of all MS Office tools.

**Technical Skills**

|  |  |  |  |
| --- | --- | --- | --- |
| **OS Windows**  **OS Ubuntu** | ❶❷❸❹❺  ❶❷③④⑤ | **Arc-GIS**  **DIVA-GIS**  **Maxent**  **ENM Tools** | ❶❷③④⑤❶❷❸❹⑤  ❶❷❸❹⑤  ❶❷❸④⑤ |
|  |  |  |  |
| **Coding in R**  **Coding in Python**  **MS-SQL**  **MySQL**  **Database design**  **Data warehousing**  **HTML/CSS** | ❶❷❸❹⑤  ❶❷③④⑤  ❶❷❸④⑤  ❶❷③④⑤  ❶❷③④⑤  ❶❷❸④⑤  ❶❷③④⑤ | **Bayestraits**  **BayesPhylogenies**  **MrBayes**  **Mesquite**  **Phylip**  **Mega6**  **RAxML** | ❶❷❸④⑤❶❷❸④⑤  ❶❷③④⑤  ❶❷❸④⑤  ❶❷③④⑤❶❷❸❹⑤  ❶❷❸④⑤ |

**Research Interests**Niche Modelling ● Palaeoecology ● Quaternary Science ● Phylogenetics ● Palaeoclimate reconstructions ● Databases and data management● Process Automation ● Data Science ●  **Professional Qualifications and Membership**

* 2010ISEB (Information Systems Examinations Board) certified Software Development & Testing
* Member of: Royal Entomology Society ● British Ecological Society ● Quaternary Research Assoc.

**Teaching and Communication**

* 2013- Demonstrator for Environmental Biology first year field course. Duties included explaining concepts and principles of hedgerow ecology, assisting student practical and written work and general duties of assembling equipment and assisting lead lecturer.
* Volunteered at NI Science Festival 2015 ● Member of STEMNet

**Grants, Awards and Prizes**

* 2013 ● E500 ● COST INTIMATE ● Travel & accommodation to present at Spring INTIMATE conference.
* 2013 ● £500 ● QUB Staff Training & Development Unit● co-applicant for provision of R training course.
* 2014 ● £100 ● QUB entrepreneurial award ● Winner of QUB “What’s the Big Idea?”
* 2014 ● SET for Britain ● Shortlisted for science communication award.
* 2015 ● £600 ● INQUA QRA (Quaternary Research Association) ● Travel grant for INQUA Conference.
* 2015● £1000 ● William and Betty McQuitty QUB travel scholarship ● Travel grant for INQUA Conference. **Talks and Conferences  
  Milne, G.**, Cameron. A and Whitehouse, NJ., 2013, *How reliable are palaeo-climatic variables for niche reconstruction?*[Conference presentation at the Spring INTIMATE meeting 2013]  
  **Milne, G.**, Cameron. A and Whitehouse, NJ., 2013, *How reliable are palaeo-climatic variables for niche reconstruction?*[Poster presentation at the SET for Britain awards, 2014] **Milne, G.**, Cameron. A and Whitehouse, NJ., 2013, *Does the present predict the past? Case study using biological proxies* [University of Plymouth guest speaker at PhD student seminar]