**Georgina Milne**   
Georgina Milne graduated from the University of Cambridge in 2008 with a Masters in Natural Sciences (MA). During her undergraduate degree, Georgina worked as a lab assistant in the Agri-Food and Biosciences Institute (AFBI) assisting with data collection for arable crop trials. She completed a Masters (MSc) in Management at Queen's University Belfast before joining Deloitte consulting as a trainee analyst in database development, data warehousing and data analytics. Georgina later moved to Citigroup as a software developer in a data warehouse team, working to develop reports for the business and analyse data for the financial markets. Georgina was subsequently awarded a fully funded PhD at Queen’s University, Belfast in theoretical ecology, and currently models how species have been impacted by past climate change.  **--------------------------------------Education----------------------------------------**

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

*Environmental niche evolution and ancestral niche reconstruction*

My current role is a PhD candidate in theoretical ecology is largely computational and requires a wide skill-set and high technical competence. This thesis is based on modelling how species have responded to past climate change, and developing novel methods to reconstruct the climatic preferences for species living millions of years ago. I work with large datasets, and use a range of modelling tools (including Bayesian modelling) to manipulate the data, analyse the results and ensure that the output is clear, succinct and comprehensive.   
*Skills: Coding in R, Python, and SQL ● GIS (Geographic Information Systems) ● Process automation ● Statistical analysis ● Scientific writing ● Collaboration with co-authors, peers and supervisors ● Presenting research at conferences ● Poster presentations ● Applying for grants and funding*

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| **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. The investigation was largely quantitative; 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.

*Skills: Quantitative and qualitative research techniques ● Statistical analysis ● financial awareness*

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| **MA Natural Sciences 2:1** | **University of Cambridge** | **September 2005** | **June 2008** |

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

**-------------------------------Employment History---------------------------------**

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| **Analyst Software Developer** | **Citibank** | **December 2010** | **August 2012** |

As an analyst software developer in a global data mining team I worked on a multi-terabyte database in MS-SQL server (2008) which housed the aggregation and reporting of global foreign exchange data (currency trading). The data mining team developed and managed the database and also processed the data into reports and charts to help the business manage currency sales. This technical role required software development skills, data analytics and understanding of the financial markets. The position also demanded extensive knowledge of MS-SQL/VBA/MDX, MS-Excel, Reporting Services (SSRS) and general data warehousing tools.  
*Skills: Data warehousing ● Database design and development ● Reporting in SSRS ● Data Integration in SSIS ● OLAP and Development in SSAS ● System support and bug fixes ● Teamwork*

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

As a graduate analyst consultant I trained extensively in the basics of software development, project lifecycles and stakeholder engagement. Clients included the NHS and Invest NI, where I specifically assisted in the design, development and implementation of data warehouse solutions for data storage, aggregation and analytics. Technical skills for this role include coding in MS-SQL /VBA and also extensive knowledge of all MS Office tools.   
*Skills: Basic project management ● Client engagement ● Graduate recruitment ● Writing presentations and preparing for bids ● MS-SQL ● Data analytics ● COGNOS Business intelligence tools ● Data warehousing ●Advanced/Expert MS-Excel and Word capabilities*

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| **Lab Assistant** | **AFBI** | **Casual 2005-2008** |  |

Duties associated with this role included general harvesting tasks, collection of crop-trial data and data entry for the continual testing and improvement of crops such as cereals, potatoes and grass. I was also specifically involved with assessing crops for disease and quantifying harvest yield.  *Skills: Working within the agricultural sector ● data collection and analysis in MS-Excel ● teamwork*

**----------------------------------Technical Skills-------------------------------------**

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| **Operating systems**  OS Windows *…………..*  OS Ubuntu*………………* | ❶❷❸❹❺  ❶❷③④⑤ | **SSIS** (SQL Server Integration Services)……………  **SSAS** (SQL Server Analysis Services)………………. **Tableau** (Data Visualisation)………………………….. | ❶❷❸④⑤  ❶❷③④⑤  ❶❷❸④⑤ |
| **Code and data** R……………………………..  Python*…....................*  MS-SQL*…………….…….*  MySQL …………*……...*  HTML/CSS*….…………..*  VBA*…………………………* | ❶❷❸❹⑤  ❶❷③④⑤  ❶❷❸④⑤  ❶❷③④⑤  ❶❷③④⑤  ❶❷③④⑤ | **MS Office Package**  *MS Word………………………..................................*  *Excel……………………………....................................*  *Access…………………………....................................*  *PowerPoint……………………..................................*  **Other**  Geographic information Services (GIS)………….. | ❶❷❸❹⑤  ❶❷❸❹❺  ❶❷❸④⑤  ❶❷❸❹⑤ ❶❷❸④⑤ |

**----------------------------------Personal Skills-------------------------------------**

* **Software Development** – over three years’ experience working in large software development houses and three years’ experience as a full time PhD candidate using R, Python, MS Excel, MS Access and GIS tools to solve problems.
* **Written Communication** -published scientific papers and intensive work on a PhD thesis. Regular contributions e to the Queen's University science blog.
* **Community Engagement -** Volunteer at NI Science Festival 2015 ● Member of STEMNet (an organisation which encourages pupils to engage with STEM careers). **●** Volunteer with community groups campaigning for environmental action.
* **Verbal Communication** - Presenting technical research at conferences, including a shortlist for science communication (2014) ● assisting students with fieldwork as a paid demonstrator.
* **Grant writing and bid-work** – track record in applying for grants as a PhD student, totalling over ~£1200 for travel and research.
* **Entrepreneurship** – Scientific research includes the refinement and automation of manual processes ● Winner of the 2014 “What’s the Big Idea” Queen’s University Entrepreneurial award.
* **Mentoring and collaboration –** Worked at improving Citigroup’s Peer Mentoring programme ● Involved in Graduate recruitment and Women in Technology within Deloitte ● Collaborated with international co-authors and researchers during PhD work.

**Employment Interests**

Data analysis ● Data modelling and information sciences ● Data visualisation ● System support and bug investigation ● Process reform and automation ● Ethical and environmentally aware projects