

# Dr Joe Gallagher

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## PERSONAL PROFILE

Data-driven biologist with expertise in data analysis and interpretation; experienced in the design and conduct of experimental work from the ground-up. Seeking data analyst roles in order to transition into the field of data science, ideally in areas of biological science or health care.

## EDUCATION

Sept 2011 - Mar 2016 **Doctor of Philosophy**, University of Sheffield, UK  
"Gregarious immunisation in the mealworm beetle, *Tenebrio molitor*"  
Sept 2007 - June 2011 **MBiolSci Zoology**, University of Sheffield, UK  
First Class (Hons.)  
Sept 2005 - July 2007 Birkenhead Sixth Form College, Wirral, UK  
A2-Level Biology (A), Mathematics (A), Psychology (A)

## SKILLS SUMMARY

### Technical skills

- **R programming**: statistical analysis (regression, general linear models, mixed modeling, principal component analysis, etc...), machine learning (classification, resampling, random forest), trajectory analysis, graphical visualisation (ggplot2), package development and documentation (using knitr)
- **Microsoft Excel**: pivot tables, VLOOKUP, macros
- **Computer vision**: automated analysis of microscopy images used in invertebrate immunology assays (C++); developed **motion tracking** software (C++) to quantify insect locomotion and behaviour
- **Web development**: HTML5, CSS3, some JavaScript, PHP
- Relational databases: design and queries (**MySQL, SQLite**); basic administration (phpmyadmin)
- **Web scraping** and **data / text mining** (JSON/XML)
- **Bash** scripting on **Linux** OS
- Use of scientific databases (e.g. **Web of Science** for citation indexing)

### Communication and teamwork skills

- **Published** in peer-reviewed scientific journals (available on request)
- **Reviewer** for peer-reviewed scientific journals

- **Oral and poster presentations** at scientific conferences
- **Teaching assistant on** numerous undergraduate **laboratory practicals** (2011 – 2015)
- Provided **technical training** on laboratory techniques and data analysis to visiting students and members of staff
- **Co-supervised** several undergraduate and Masters research projects
- **Active contributor to outreach** programme 'Discovery' at University of Sheffield, a series of interactive workshops and talks aimed at promoting STEM to schoolchildren (2012-2016)

#### Other employment skills

- Experience working with the **public** and providing **customer service** in a variety of commercial environments, including retail, kitchen and bar work
- Comfortable in high pressure environments and working to strict deadlines

### **RECENT EMPLOYMENT**

#### Ph.D., University of Sheffield, UK (Sept 2011 - Mar 2016)

- Four year research project requiring innovation, initiative, and patience to develop and answer a novel question in the field of insect immunology
- Developed skills in logical reasoning, experimental design, and data analysis; improved time-management through meeting regular deadlines
- Gained new laboratory and computational skills through a combination of independent learning, collaboration, and attending training courses, conferences, and workshops
- Honed communication skills by working with peers, regularly presenting and discussing results, and through teaching and supervisory roles

### **GENERAL EMPLOYMENT**

Sept 2011 – Dec 2015	Graduate teaching assistant (University of Sheffield)
Aug 2010 – Sept 2010	Field assistant (CNRS de Moulis, France)
Sept 2008 – May 2009	Chef (The Cavendish, Sheffield )
June 2008 – Sept 2008	Chef / Bar staff (Central Hotel, Wirral)
Dec 2005 – Sept 2007	Retail assistant (NEXT, Wirral)
Aug 2005 – Dec 2005	Retail assistant (Iceland Frozen Foods, Wirral)

### **REFERENCES**

References are available on request.