University of Nottingham
UK | CHINA | MALAYSIA

Role profile

Job title	Research Assistant	Job family and level	Research and Teaching Level 4a
School/ Department	Psychology	Location	University Park Campus

Purpose of role

The Research Assistant will join the Humphries' group on the BBSRC-funded project "The computational basis of foraging". Its goal is to develop rigorous computational accounts of how humans and other animals learn and make foraging decisions, in collaboration with the groups of Matthew Apps (Birmingham) and Nathan Lepora (Bristol).

The RA will use computational models of stay-or-leave decisions in foraging to derive predictions for how foragers vary their leaving times, and test those predictions against behavioural data from foraging tasks done by humans and rodents.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	**Analyse stay-or-leave foraging models** ▪ Implement models including stochastic action selection models and accumulation to bound models ▪ Derive predictions for leaving times from simulation and/or analysis of models	40
2	**Test model predictions** ▪ Understand experimental foraging tasks and data ▪ Analyse variations in behaviour in each task ▪ Compare model predictions to data	40
3	**Report analyses** ▪ Regularly update PI with results ▪ Contribute publication-ready figures of analyses ▪ Present results to lab ▪ Share updates with grant consortium as required	20

Person specification

	Essential	Desirable
Skills	▪ Good programming ability in Python and/or MATLAB ▪ Ability to build relationships and collaborate with others ▪ Ability to manage your own research on a day-to-day basis	
Knowledge and experience	▪ Knowledge of computational models of behaviour (e.g. reinforcement learning, diffusion models, foraging models)	▪ Knowledge of foraging
Qualifications, certification and training (relevant to role)	Completed an undergraduate degree or MSc in a relevant quantitative discipline (computational neuroscience, maths, physics, computer science, or engineering).	

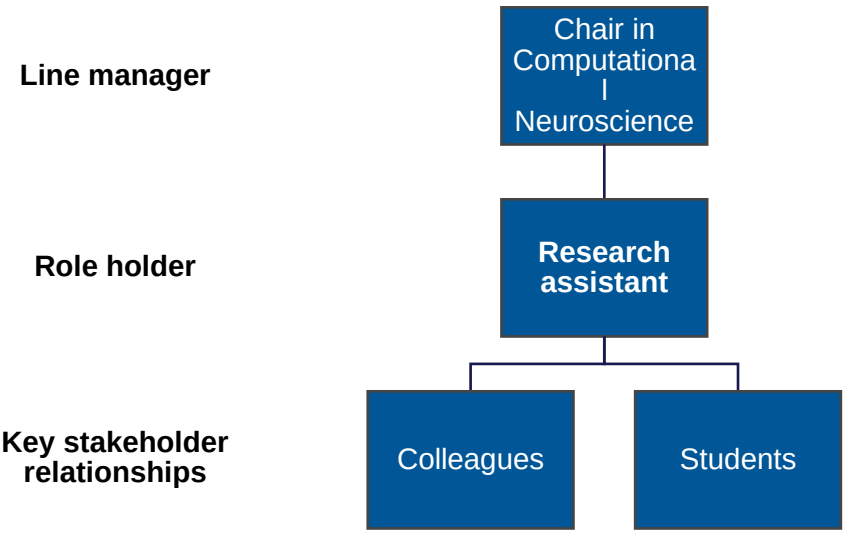
Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

Valuing people	Is friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
Taking ownership	Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
Forward thinking	Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
Professional pride	Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
Always inclusive	Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

This is a Smart Art diagram. Click on the boxes to enter the role holder's job title, line manager's job title and any direct reports (if applicable). If a role does not have any direct reports, remove this box by double clicking on it and pressing Delete.
****Please remove this paragraph of instructions before submitting the role profile****



For job levelling/benchmarking purposes only – please remove before publishing

Decision making

Taken independently by the role holder

- Time management;
- writing code;
- running analyses;
- sourcing literature
- production of figures

Taken in collaboration with others

- Design of computational models
- Predictions of models
- Methods for analysing data
- Comparisons of model and data

Referred to the appropriate line manager (please name) by the role holder

- Interpreting results
- purchase decisions
- dissemination strategy
- writing papers