

Application for a Postgraduate Award (APA)

Candidates put forward on this form will be considered for a Psychology Department Teaching Fellowship. There are 5 Fellowships. Each Fellowship includes full fees and a stipend for 4 years (so each is worth approximately £70,000).

Our best candidate this year will be put forward for a University or a Doctoral Academy Scholarship. If successful the candidate will receive a fully funded scholarship for 3 years. These scholarships do not involve a teaching commitment (please see penultimate section of this form).

Other scholarships may be available to appropriate candidates. These will also be 3 year awards that do not involve any teaching. All candidates submitted via this form will be considered for all scholarships for which they are eligible.

Each member of staff may put forward a maximum of one candidate.

But please do not put forward a candidate unless they meet the following minimum criteria. Candidates for scholarships should have completed a BSc/BA (with a 1st or high 2.1) and completed a MSc/MA (with a Distinction or high Merit) or equivalent. If your candidate has other qualifications, or if they have nearly completed a Masters programme (e.g. one that finishes in Dec 2016 or Jan 2017) please see Josie or Mark.

This form must be completed by the potential supervisor – not the applicant

Each year we decide which students will be awarded PhD scholarships. Each year students are put forward for scholarships without the selection committees having the students' full details. This makes comparisons between applicants difficult. Therefore the following form has been designed to elicit similar information about all candidates.

The form is long but nearly all the information should be included in the student's application, and can be cut and pasted from there. If the information is not on the application form it is very important to discuss any missing information with the student.

The selection committee needs evidence that the supervisor has considered all aspects of the student's application and they will make their decisions based on the contents of this form and ONLY THIS FORM

This form is an internal departmental document and does not need to be perfectly typed or formatted, we simply require the equivalent information about every candidate, so presentation is not an issue.

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| Supervisor's name: Tom Stafford |
| Applicant's name: Gittu George |

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| Applicant's preferred first name: George |
| Nationality: Indian |
| Country of residence: US |
| Date of birth: 15/11/1991 |
| Date when candidate intends to start at Sheffield: October <i>If this is not October of the application year please explain why not</i> |
| Is this application for a full time PhD? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| <i>If not please give details of planned part-time study</i> |
| What is the candidate's fee status ? Home/EU <input type="checkbox"/> Overseas <input checked="" type="checkbox"/> |
| <p><i>Overseas candidates</i></p> <p><i>Please note the departmental scholarships only cover UK fees. Should you wish an overseas candidate to be considered for the departmental scholarship a note must be added here with evidence that the candidate can pay the difference between the UK and the overseas fee. All the available Department scholarships starting in October 2017 are for 4 year Teaching Fellows.</i></p> <p><i>This year we can put overseas candidates forward for Doctoral Academy and University scholarships and these scholarships do include full overseas fees.</i></p> <p><i>If the candidate you plan to put forward is an overseas student please discuss this with Mark or Josie prior to submitting this form. Overseas candidates must have the required English language qualifications.</i></p> |

Applicant's qualifications

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| Undergraduate qualifications: |
| Title of degree (e.g. BSc Psychology): Computer Science and Engineering |
| Award (e.g. first): First |
| Date of award: May 2013 |
| University: Mahatma Gandhi University, Rajagiri School of Engineering & Technology |
| <p>Title and brief summary of L3 research project – 5 lines maximum</p> <p>Employee Payroll Using Facial Recognition System: This project was suggested by Mahatma Gandhi University computer science department for marking the attendance of the faculties in the college using facial recognition system and then calculating their payroll at the end of every month.</p> |

*Please note the undergraduate degree should normally be a **1st or high 2.1**. A full transcript of marks should be included. If the degree is from a non-UK University please give the ranking of that University. If the award is not a typical Psychology degree please explain why the candidate's qualifications are appropriate for a Psychology PhD*

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| Postgraduate qualifications: |
| Title of degree (e.g. MSc Psychology): MSc Computer Science |
| Award (e.g. Distinction): 3.8 GPA (out of 4) |
| Date of award: November 2014 |
| University: University of Houston - Clear Lake |
| Title and brief summary of dissertation – 5 lines maximum Analysis for Security Threat using Big Data Technologies: Created application for Tietronix Software Inc. using Big Data Technologies to monitor and report security threats. The application enabled the company to study network log files in parallel to quickly identify and report unauthorized access, or access patterns that do not match proper application usage. Additional benefits included add/edit/remove rules for monitoring, log file locations, live vs. stored data analysis etc |
| <i>Please note the Master's degree should normally be a merit or a distinction. Applicants should have finished their Master's degree before applying for a scholarship. If the degree is from a non-UK University please give the ranking of that University. If the award is not a typical Psychology Masters please explain why the candidate's qualifications are appropriate for a PhD in the Department of Psychology.</i> |

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| Other qualifications, with full details of award, date and awarding institution |
| <i>If the awards are from a non-UK University please give the ranking of that University. Please explain any overseas qualifications that may be unfamiliar to the selection committee.</i> |

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| Details of any publications: |
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| English language qualifications (for non-UK students only): |
| <i>Include full details and please confirm that the candidate meets or exceeds the minimum language requirements of the University of Sheffield - https://www.sheffield.ac.uk/postgraduate/info/englang</i> |
| <i>I already have degree from English speaking country and I got 7 band score for IELTS at the time of applying to US schools for my masters degree</i> |

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| Does the candidate have BPS GBR? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| <i>If not, please explain whether lack of GBR raises any issues (e.g. for their proposed research)</i> |
| None |

CV

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| <p>Please include/attach candidate's FULL CV</p> <p><i>This should be a full CV, without any 'gaps' so every year and all qualifications should be accounted for, and the CV should be a recent one and include details up to the date of the application. The candidate's current status (e.g. 'working at X', 'not currently employed') must be included.</i></p> <p>Attached</p> |
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| Title of proposed research: |
| <p>Description of research proposal (800 words maximum) – <i>please use non-specialist language and terms and ensure that this is the same proposal uploaded to the candidate's scholarship application. Please add a note to say if the research is likely to have impact.</i></p> <p><i>Learning is always a process with various stages. Knowing on what factors that affect to the development of these stages and how can we even make these learning more effective is an interesting question. This project will use data from chess, online tutoring and online games which will be used to answer this interesting question.</i></p> <p><i>These data sets are really bigger and traditional analytic approach won't be able to process these datasets in a timely manner. This urges the analyst to go for smarter techniques when dealing with Big Data. These smarter approaches close the gap between the promise and reality of big data analytics to increase efficiency and enable data-driven decisions. This process starts from looking at the big raw data set and transform it into a more usable format. Once this is in usable format we can ask various questions and visualize them to a wider audience.</i></p> <p><i>Previously a research by Stafford & Dewar (2014) suggested that the behavior in humans that enables them to orientate to their environment in the initial stage of learning helped them to have a better performance in learning in later stages. Further research concluded that this behavior have either negative or positive effect when the learning gets stuck at a particular stage. Another recent research by Gray & Linstedt (2016) recently proposed methods for identifying the cases where there is a variation on the expected learning performance of individuals.</i></p> <p><i>Using various statistical models and analytic techniques I aim to</i></p> <p><i>a) Establish the contrast, strengths and weaknesses of the two approaches mentioned above as applied to the data available at Sheffield</i></p> <p><i>b) Validate a method for identifying where the individual has stopped learning or remained for</i></p> |

a long time at a particular stage of learning

c) After identifying this, need to find what factors has made that individual to move away from the learning time period that we expected and why did that individual remain at a particular stage of learning for a long time

The ambition will be to create a way to identify when an individual's rate of learning is slowing along with the factors that affected to slow down learning. This will make us smarter in predicting and improving learning factor.

With my knowledge on Big Data Analytics and Computational Techniques from my academic research and professional research projects, I can better contribute in wrangling the big data and come up with ways to improve the learning among individuals. This will be having greater impact on the individual learning and on setting up the curriculum in schools. Moreover having a handle on this 'Big Data' notion will help our entire organizations in Sheffield on how to approach a Big Data problem. This research project will benefit me to get a deep understanding of the psychology of learning and a skill set encompassing state-of-the-art open-source analytics tools.

References:

Donner, Y., & Hardy, J. L. (2015). Piecewise power laws in individual learning curves.

Psychonomic bulletin & review, 22(5), 1308–1319.

Gray, W. D., & Lindstedt, J. K. (2016). Plateaus, dips, and leaps: Where to look for inventions and discoveries during skilled performance. Cognitive Science.

Stafford, T., & Dewar, M. (2014). Tracing the trajectory of skill learning with a very large sample of online game players. Psychological science, 25(2), 511–518.

Will the candidate require any special facilities?– e.g. space, specialist computing or other equipment, exceptional research expenses, exceptional travel expenses and so on? Please list with approximate costs. (If nothing is included here the selection committee will assume no exceptional facilities are required and it may be difficult to request these at a later date.)

None. Data processing will be done via University HPC facilities (e.g. iceberg)

Personal statement from candidate 10 lines maximum - this is optional – the candidate does not have to include a personal statement, but it is useful for the selection committee to have at least a brief reason why the candidate applied to Sheffield and to a particular supervisor.

University of Sheffield's modern infrastructure and laboratory/research facilities such as HPC service(ShARC , iceberg) would nurture me towards excellence in a significant way. I am intrigued by several interesting research projects carried on by Dr Tom Stafford in area of Decision making and Learning. His area of interest closely goes with mine area of interest. I was lucky enough that I got an opportunity to work with him on Implicit Bias project, after that I feel comfortable and very confident that we can bring some interesting work in coming years. I would consider it a privilege to have him as PhD advisor in continuing my quest for knowledge in this field with more insights on cognitive science and

psychology .

References - please attach TWO references. *These should be references received within 3 months of the application date. Older or undated references will disadvantage the applicant.* Supervisor's comments on both references – *this is important and should be included to show that supervisor has taken the references into account.*

Attached

Supervisor

Summary of your contact with candidate

All candidates should be interviewed, preferably by at least two members of staff. Please give details of interview and/or other meetings/correspondence with candidate - 10 lines maximum.

The candidate and myself have been working on a big data analysis project since October - taking 13 years of data from Harvard's Project Implicit (<https://osf.io/52qxl/>). This provides a measure of implicit racial bias from approximately 3.2 million people from around the world who have taken the online IAT test provided by Project Implicit. This has allowed us to map implicit racial bias across Europe. Once our map visualisation is finalised we intend to write up a short paper and publise our data through a suitable news outlet (e.g the Guardian data blog).

Code, data and maps can be seen here: <https://github.com/georgeg0/WorldBias>

This project has involved multiple skype meetings, many emails and collaboration over both technical details and coordinating with third parties (e.g. members of Project Implicit).

Please give the reasons why you are supporting this candidate - 10 lines maximum

My extensive interactions with George convince me that he has the technical ability and personal aptitude to excel at doctoral study. My field of work requires versatility in terms of data processing and statistical tools, for which George's background ideally suits him. By working together for the last five months we have demonstrated that we can work effectively and produce high quality results at the frontier of psychology and big data opportunities.

**** IMPORTANT ****

THE PANEL WILL GIVE PARTICULAR WEIGHT TO THIS SECTION

At present the only full scholarships available through the Department are 4 year Teaching Fellowships. Please confirm that you have made it clear to your candidate:

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| <i>that the scholarships are for 4 years; that the scholarships involve a teaching commitment in each of the 4 years, and that the teaching must be carried out satisfactorily or the scholarship may be withdrawn.</i> | |
| I have informed the candidate of the above conditions | Yes |
| Does your candidate have previous teaching experience? | Yes |
| <i>If your candidate has had previous teaching experience please summarise their experience and say how you have checked this experience (e.g. checked teaching certificate, discussed in the interview, cited in references).</i> | |
| Was teaching assistant during MSc course (details on CV). 20 hours/week. No qualification available. | |
| <i>If your candidate has not had previous teaching experience, please give your reasons why you think the candidate will be a suitable Teaching Fellow (e.g. by having asked the candidate to make a presentation during the interview, by asking the candidate's referees their opinion of the candidate's potential teaching abilities, by evidence of similar successful activities such as public engagement).</i> | |
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Faculty/University Scholarships

Our best candidate this year will be put forward for a University or a Doctoral Academy Scholarship. If successful the candidate will receive a fully funded scholarship for 3 years. These are prestigious awards that are called a 'University of Sheffield Scholarship' (which may include an enhanced stipend) or a 'Doctoral Academy Scholarship'. These scholarships do not involve a teaching commitment. This year the Department will receive a maximum of only one such scholarship (i.e. one University Scholarship, OR one Doctoral Academy Scholarship, OR no award at all).

If your candidate is offered a University/Doctoral Academy scholarship the Department expects the candidate to accept the University/Doctoral Academy scholarship (instead of the Teaching Fellowship). The University/Doctoral Academy awards are rare and therefore there is no need to discuss these possibilities with your candidate, but if you foresee any problem (e.g. you think your candidate would only be willing to accept a Teaching Fellowship) please discuss with Josie or Mark.

Fee Waiver (to cover home/EU fees only)

At least two fee waivers are available for the Department to offer to cover all or part of a candidate's fees. Please check with your candidate that if they are unsuccessful in gaining a full scholarship they would like to be considered for a fee waiver and that they could find their own funding for their living expenses.

Do you wish your candidate to be considered for a fee waiver? (please delete below as appropriate).

Yes, my candidate has provided evidence that they can meet all their own living expenses.