



The
University
Of
Sheffield.



CITY College
An International
Faculty Of
The University.

SEERC – Call for PhD Applications 2014-2015.



PhD Studies at SEERC – Call for Applications (Deadline: 30/5/2014)

1. The PhD Programme

The PhD programme is run jointly by the University of Sheffield and the International Faculty CITY College, under a joint supervision scheme. The programme is hosted by the South East European Research Centre (SEERC), a Research Centre of the University's International Faculty based in Thessaloniki, Greece.

At SEERC there are currently two possibilities for a PhD degree:

A) Full Time programme. The duration is 3 years (with a 4th year available for writing up the thesis) and it requires full time commitment on the part of the PhD student, which means that one would have to be physically present at SEERC premises located in Thessaloniki.

B) Part Time programme, with duration 6 years (with 2 years available for writing up). To be eligible for a part-time PhD the candidate should be able to prove significant experience in the selected field. In this case, the PhD student has the obligation for a minimum of two visits to Thessaloniki annually for supervision purposes. All other communication with supervisors occurs via e-mail, Skype and telephone.

Students applying for the programme must have an excellent academic record (normally Degrees with Distinction) and should possess a Master's Degree. Potential work experience, research training and publications play important role also. Applicants for part time positions must submit proposals that demonstrate a clear linkage between their current work and their PhD topic.

Part of the PhD programme involves the Doctoral Development Programme (DDP). The DDP concerns both Full Time and Part Time Student. Its main target is to enhance and broaden the range of skills of the PhD candidates. Further information on the DDP can be found at the following link: <http://www.shef.ac.uk/ris/pgr/ddportal>

2. Entry Requirements

The University has clear minimum entry requirements. These are the following:

- A relevant first Degree (Normally with Distinction)
- A Master's Degree (Normally with Distinction)
- Proof of English Language Qualifications

For # 1-2 topics, the standard English Language requirement is IELTS at 7.0 with a minimum of 6.0 in each component or equivalent.

For the # 3-4 Research Topics please see the English language requirements for prospective postgraduate students at The University of Sheffield:

<http://www.sheffield.ac.uk/postgraduate/info/englang>

3. Tuition Fees

The current fees for PhD studies (academic year 2014-2015) are **8500 British pounds annually** for full-time study and **4250 British pounds** for the part time programme (a small increase is expected every year on fees. Exact figures will be given to successful applicants).

4. Fee Waivers

Once again this year, the University of Sheffield and CITY College will be offering a small number of fee waiver positions for students to read for a PhD **through SEERC in Thessaloniki**. The fee waivers are offered to applicants with outstanding academic records and the process is highly competitive. **Please note that fee waivers are only given to the candidates applying for Full time studies.**

More information on the terms of reference of the Fee waivers can be found at the following link:

http://www.seerc.org/index.php?option=com_content&view=article&id=7&Itemid=60

5. Submission process

We accept proposals from qualified students for Full-time or for Part-time study, **however fee waivers are offered for FULL TIME studies only. The topics on which we accept applications are the following:**

Research Track 1: Enterprise Innovation and Development	
Topic 1:	Organizational innovation: The interaction of external organizational networks with internal network patterns of collaboration.
Topic 2:	Removing obstacles to innovation using the Triple Helix Model: The case of SEE
Research Track 2: Information and Communication Technologies	
Topic 3:	Distributed and self-adaptive systems for acoustic scene understanding
Research Track 3: Society & Human Development Psychology, Politics, Sociology, and Education	
Topic 4:	Cognitive Neuroscience of emotions in older adults: Self-disgust

In order to apply, PhD candidates need to download the [Application Form](#) along with the [Guidance Notes](#) from SEERC's web site¹, complete the application, and then send, by post the application folder to SEERC.

Please note that incomplete applications will be disqualified from the process. Candidates have to ensure that all supporting documentation is included in the application. The application form and supporting documents should be accompanied

¹ http://www.seerc.org/index.php?option=com_content&view=article&id=5&Itemid=59

by a **Research Proposal** and an updated **CV**. **The CV and the proposal of the PhD candidate should be sent electronically also, by e-mail at phd_admissions@seerc.org**

The **Research Proposal** should be typed, the length should be about 1,500 – 2,000 words (6 to 8 pages) and should include the following:

- a) *Title of the proposed thesis*
- b) *Reference to one of the Specific Research Topics (section 6)*
- c) *Proposed mode of work (full time or part time)*
- d) *Proposed source of Funding: Fee Waiver (Full time Only), Personal funding, funded by any other institution/organization e.t.c.*
- e) *Background to research topic*

This section needs to introduce the topic before discussing it in relation to wider academic debates. The section might seek to situate the topic and highlight why the issue being addressed is important - this should be identified and justified as an important/interesting academic issue not simply in terms of current media/political/popular interest.

- f) *Specific problem(s) to be examined*

In his section the discussion of the topic needs to be more specific. The focus should include reference to the framework or conceptual approach that the research might seek to draw on. Also the discussion is likely to highlight and make reference to parallel, comparable and complimentary research. The aim of this section is essentially to set up the area of research specifically. The challenge is to ensure that the proposed research has a substantive empirical and conceptual focus, both of which are suitably grounded in contemporary academic debate with appropriate citations to relevant literature. By the end of the section a gap in existing knowledge needs to be highlighted and the research questions(s) that the thesis will address be stated.

- g) *Methods of research proposal, plan and timetable of work*

The research methods section needs to highlight what methods will be used and how, with an appropriate level of detail. In the case on quantitative research the data set to be accessed and used should be identified and the nature if proposed statistical analysis detailed. In the case of more qualitative research, again the methods should be elaborated and proposed stakeholders/populations to be interviewed/surveyed should be detailed. Due consideration should be given to accessing relevant data/interviewees. Proposals should also highlight ethical issues and potential limitations.

- h) *Resources available and required (if any)*
- i) *Any other information in support of your proposal*
- j) *The proposal should include correct literature citations and a brief bibliography*

All applications should be submitted at SEERC by 30/5/2014 (postmarked).
(PLEASE NOTE THAT ON THE ENVELOPE/FOLDER SHOULD BE CLEARLY WRITTEN "SEERC-SHEFFIELD DOCTORAL PROGRAMME APPLICATION FOLDER")

Moreover, **an electronic version of the Research proposal and the CV should be sent by 30/5/2014 by email to SEERC at phd_admissions@seerc.org.**

Incomplete applications missing one or more documents or failure to submit the hard copies of the application by post (i.e. submission only of the proposal in electronic form) to SEERC will result to the application's disqualifying.

The possible outcomes of your application are:

- Acceptance to read for a PhD
- Acceptance to read for a PhD with a fee waiver (FULL TIME candidates only)
- Rejection

All candidates will be informed on the outcome of the evaluation procedure, which will involve an interview at SEERC premises with the proposed supervisors.

A step-by-step guide to submitting your application	
Step 1:	Read in detail the requirements from this Call for Proposals
Step 2:	Download the application form
Step 3:	Read the Guidance Notes for completing it
Step 4:	Prepare Research Proposal and an Updated CV according to Guidelines
Step 5:	Prepare supporting documents for inclusion in the application pack
Step 6:	Send by post or in person 1 envelope with the application and all the supporting documents to SEERC. Do this by 30/5/2014 (post stamp as proof of validity of the application).
Step 7:	Send by 30/5/2014 the Research proposal and the updated CV by e-mail to phd_admissions@seerc.org

6. Research Topics

Research Track 1: Enterprise Innovation and Development

[Topic 1: Organizational innovation: The interaction of external organizational networks with internal network patterns of collaboration.](#)

Organizational innovation is a complex phenomenon, one that in many cases appears largely driven by serendipity. Despite this complexity, researchers have uncovered the importance of proximity for innovation as a significant factor bearing on firms' ability to generate novel ideas, processes, and products. Location near other organizations helps firms acquire knowledge by increasing chance encounters and by facilitating face-to-face interaction. Increasingly, researchers emphasize that the

effects of proximity on innovation are moderated by whether a firm can pair information acquired locally and informally from neighbors with other more exclusive sources of new knowledge. Firms acquire such knowledge by establishing ties to distant collaborators, recruiting employees, embedding themselves in scientific communities, or forging other connections outside their boundaries. If a firm is proximate to many industry peers, then a cohesive network helps inventors' process knowledge spillovers and mobilizes support from colleagues for developing their ideas. By contrast, when a firm has few proximate organizations from which to capture spillovers, inefficient networks that are slow at diffusing information are beneficial. Such networks provide opportunities for brokerage and parallel problem solving, which together help create and sustain the diverse ideas and perspectives needed for innovation (Burt, 2004).

Despite these advances, theories of geography and innovation in organizations remain limited in several respects. Contemporary theories also do not address how, despite lacking the advantages of proximity, some firms that are relatively isolated geographically are able to produce important innovations. A recent approach to advancing theories of geography and innovation integrate insights from research on networks in organizations to demonstrate the importance of considering firms' local external environments and their internal patterns of collaboration in tandem (Funk, 2014). Beyond helping to account for innovation among firms in very different local environments, knowledge of collaborative structures within organizations is likely to have broader value for research on the geographic diffusion of knowledge. To the extent that patterns of collaboration within organizations vary among organizations, within and across regions, internal organizational networks should have consequences for broader knowledge flows because of differences in their capacity to absorb, transmit, and alter the information that diffuses to (and through) them geographically. Additionally, this point to the research need for systematic research on geographically isolated firms. Existing work on geography and innovation largely focuses on explaining the conditions under which proximity leads to maximum performance gains. Yet many innovative companies, even in knowledge-intensive sectors, are located far from peer organizations. Future analyses should seek to further explain the success of such companies given the disadvantages of isolation. Additional research in this area will both help to clarify the conceptual relationship between geography and innovation and also lead to valuable insights for practicing managers of firms in locations less proximate to industry peers.

Topic 2: Removing obstacles to innovation using the Triple Helix (TH) Model: The case of SEE

This PhD proposal calls for project looking at how the TH Model might be applied to rebuilding and fostering a more resilient economy in SEE. We are interested in PhD proposals that will critically assess how the TH framework can be used to understand the opportunities and obstacles to develop SEE as a more innovative and entrepreneurial economy.

Research Track 2: Information & Communication Technologies

Topic 3: Distributed and self-adaptive systems for acoustic scene understanding

The last two decades the complexity or scale of some applications rose so fast that a single machine could not handle. The client server paradigm became unable to respond to the user demands in a reliable and efficient manner. Centralized systems are prone to a single point of failure and their overall efficiency was affected by the bottlenecks on the server side, together with lack of adaptability to cope with dynamic environments.

Two are the main advantages that distributed architectures offer compared to centralised approaches; avoidance of the single point failure problem and better scalability and utilisation of resources. Therefore it seems natural that in recent years systems operating within distributed environments have experienced considerable growth in size and diversity.

At the same time the development of Grid environments, the shift to service oriented architectures, the increased interconnectivity between computer networks, cloud computing, the introduction of the Internet of things leading to an explosive increase of the number of computers connected, moved distributed systems beyond the initial application of facilitating file exchange to a much broader range of domains

The last years there is a trend to be inspired by natural systems by introducing bio-inspired properties and behaviours, so that a distributed environment could become a complex adaptive system, in the sense that adaptation, resilience and self-organization will emerge as a result of simple interactions between peers.

This project will apply the principles of distributed and adaptive systems to the problem of acoustic scene understanding; put simply, the focus of the project is to build "machine listeners" that interpret complex mixtures of sound in the same way that human listeners do. Currently, machine listening systems generally assume that sound is collected from one or more static sensors. However, there is much to be gained from a distributed approach to solving the problem. For example, a number of autonomous robots, each with sound sensors, could collaborate in order to map the acoustic scene. This raises many interesting research questions; how should the robots best distribute themselves in the environment in order to separate the acoustic sources that are present? How can the sensors of the robots (e.g., distance sensors) be used to adapt to different reverberant environments?

The aim of this work will be to investigate all the above mentioned areas and propose a generic bio-inspired solution based on a set of emergent self-optimising and self-adaptive structures and processes which will be the major catalyst for efficiency, scalability and adaptability in a (fully) distributed network of autonomous robots, aiming to provide an efficient solution towards robust machine-listening systems.

A case study should be devised that will be used to demonstrate the applicability of the approach, allowing the acoustic sources in an environment to be mapped without any human.

Research Track 3: Society & Human Development Psychology, Politics, Sociology, and Education

Topic 4: Cognitive Neuroscience of emotions in older adults: Self-disgust.

With age there are changes in emotion although this domain is relatively unexplored as compared to other domains such as cognitive abilities. Thus, older adults show an overall decrease in the magnitude of their physiological emotional reactions, have greater emotional control and report fewer negative emotional experience. The bias of older adults towards positive information has been termed the *positivity effect*. This effect has been explained in terms of an adaptive strategy in the framework of socioemotional selectivity theories. That is, it has been proposed that older adults seek emotional stability and thus focus on positive emotions and/or avoid emotionally negative information (Carstensen, Mikels and Mather, 2006). Along with changes in emotions, studies suggest an age-trend in the prevalence of mood disorders such as depression; depression appears to decrease in older ages as compared to middle ages (George et al., 1988). Still, depression remains one of the main mental health problems associated with old age. In this framework, self-disgust may be an important emotion to study in relation to emotional and mood changes with aging. Disgust is increasingly recognised as playing a significant role in a range of mental health problems, such as specific phobias, contamination-based obsessive-compulsive disorder, eating disorders and post-traumatic stress disorder. Disgust itself is a heterogeneous construct, and recent research has discovered an important mediating role for disgust directed at the self – ‘self disgust’ – in depression, particularly in mediating the connection between dysfunctional depressive thoughts and depressive symptoms (Overton et al., 2008; Simpson et al., 2010). To date there are no full studies investigating self-disgust in older adults, however our own pilot data suggest that there is a negative correlation between age and self disgust. The reasons for a change in this emotion are likely to be multifarious – for example, aspects that contribute to self-disgust such as body image have been shown to change with age, and retirement may have complex effects on self-image. To try to unravel the complex relationship between emotions and depression in ageing, studies will be directed at the following questions: What is the relation between cognition and emotion? For instance it has been shown that there is a relationship between Executive functions and the positivity effect. Are there any changes in the neurophysiological indexes (e.g, Skin conductance, Heart rate, EEG) of emotions with age? Is there any relationship between depressive thoughts and emotions like self disgust in older adults?



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