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| Name | Siddharth Sigtia | | | | |
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| Student Number | 120120770 | | | | |
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| Institute/School | Electronic Engineering and Computer Science | | | | |
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| Primary Supervisor | Simon Dixon | | | | |
|  |  | | | | |
| Initial enrolment date | **24 September 2012** | | | | |
| Year of study (please circle) | **1** | **2** | **3** | **4** | **Writing Up** |
| Final Submission date | **24 September 2016** | | | | |
|  |  | | | | |
| Thesis Title | Improving Music Information Retrieval tasks with Neural Networks | | | | |
|  |  | | | | |
| **Main source of studentship funding (e.g. AHRC, NERC, QMUL, self-funded):** | | | | | |
|  |  | | | | |
|  | Self-funded | | | | |
| **Requested funding breakdown:** |  | | | | |
| *Cost category* | *Total amount* | *Amount requested from PGRF* | *Amount sought from other funders* | | |
| Accommodation | 250 | 250 | 0 | | |
| Conference registration | 300 | 300 | 0 | | |
| Subsistence | 150 | 150 | 0 | | |
| Travel | flight(750);  Airport Shuttle Service(10) | 750 | 0 | | |
| Other research expenses (please specify) | 0 | 0 | 0 | | |
|  |  |  |  | | |
| Other expenses (please specify) | 96 (visa) | 96 (visa) | 0 | | |
|  |  |  |  | | |
| *Total* | 1546 | 1546 | 0 | | |
|  | | | | | |
| Have you previously applied to the fund? | Yes |  | No | **No** | |
| **If ‘Yes’, please state when and amount awarded** *(if any)* | **Date** |  | **Amount** |  | |

**Brief description of the purpose and significance of these expenses in relation to your research.** If you are applying to support a presentation at a conference please provide the title of your paper or poster, date, location and title of conference and the reasons it is important to present at this particular conference. Do NOT include a detailed description of your thesis, or the presentation's abstract. Include the location and dates of the event.

If you are applying to visit an overseas research institution please describe exactly why the visit is important for your research and the lasting impact, on future collaborations for example.(*Max 500 words)*

This application is to request funds in order to attend **The 15th International Society for Music Information Retrieval (ISMIR)**conference. The conference takes place between **27th-31st of October**in **Taipei, Taiwan**.

I have submitted a paper titled ‘**RNN-based Music Language Models for Improving Music Transcription’**. This is my first attempt at applying neural networks to a practical, large-scale problem in Music Information Retrieval. Learning statistical models that capture the temporal structure of symbolic music has always been an open problem in Music Information Retrieval (MIR). In this paper we demonstrate the effectiveness of neural network based models for learning temporal structure and also present a way of incorporating this information in a music transcription system. Our results are very encouraging and show an overall improvement over existing methods over several tasks.   
  
ISMIR is the most relevant community to present my work to. It is a highly selective and specialised conference with MIR as its main focus. Automatic music transcription happens to be one of the fundamental problems in MIR and therefore ISMIR would be the ideal place to present this work. Attending the conference will give me the opportunity to share my ideas and results with other people who are experts in the field and also obtain ideas for pursuing this thread of research in the future.

This publication (if accepted) will be my second publication in my PhD research which explores the application and extension of neural networks for solving problems in Music Information Retrieval. ISMIR and many related signal processing communities have started experimenting with neural networks and evaluating their use for solving various problems. Last year there was a tutorial on the application of neural networks to MIR at ISMIR which shows that there has been a lot of interest generated on this particular subject. Therefore apart from sharing my ideas with the wider ISMIR community, there is also a subset of people who are very interested in the specific methods that I apply in my own PhD research. It would be a great opportunity to meet them and exchange ideas and results.

Please provide **brief** **details of any conferences you have previously attended or presented at**:

I presented my paper '**Improved Music Feature Learning with Deep Neural Networks**' at ICASSP 2014 in Florence. The paper formed explored the methodology for work that I am submitting to ISMIR.

Please provide details of any **external funding** for which you have applied in relation to these expenses

I will be applying to the travel fund provided by ISMIR. I am waiting for the application dates to be announced so that I can submit my application.

**Signature** (type name if submitting electronically) Siddharth Sigtia

**Date 14 May 2014**

**Supporting statement from supervisor**. This statement should include confirmation of the ways in which the intended activity will contribute to the doctoral research and/or knowledge transfer and if external funding has not been secured, why this has not been possible (*Max 500 words*).

**Supervisor's signature** (type name if submitting electronically)

**Date**

**Please return this completed form to:**

Your School/Institute administrator, at the deadline set by them (which will be at least a week before the dates given below) who will then collate and forward on to [qmpgrf@qmul.ac.uk](mailto:qmpgrf@qmul.ac.uk) all the applications from your School/Institute.

**Sign off from Director of Graduate Studies/Research**

**Signature: Siddharth Sigtia**

**Date**

SCHOOL ADMINISTRATORS ARE REQUESTED TO ENSURE THEY HAVE OBTAINED SIGN-OFF BEFORE SUBMITTING ALL APPLICATIONS FROM YOUR SCHOOL TO [qmpgrf@qmul.ac.uk](mailto:qmpgrf@qmul.ac.uk)

**There are three annual deadlines, with the Panel convening to consider applications each term. The final deadlines for the submission of applications from Schools/Institutes are:**

**1 October**

**1 February**

**1 June**