

Professor Charles F. Zukoski
Vice Chancellor for Research
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Champaign, Illinois 61820

1 November 2002

Dear Professor Zukoski,

As Head of the Department of Computing at City University, London, and the Director of our new Centre for Computational Creativity, I am writing to you in the strongest possible support of Professor Stephen Downie's proposal for "Creation of a Music Information Retrieval (MIR) Development and Testing Database," to be carried out initially at NCSA.

City University has a historical strength in information retrieval, computer music and creativity-related research, and the proposed activity impinges on all of these interests. The proposed resource would be enormously valuable to us and to our research collaborators on the world stage, both as musicians and as computer scientists: we have interest not only in the musicology which such an exercise would enable, but also in the scientific and technical underpinning of the exercise.

In particular, the Centre for Computational Creativity hosts several research projects directly related to music information retrieval, whose work would be greatly facilitated by the existence of the proposed resource. Two of these projects are joint: one with King's College, London (see below) and one with the University of Edinburgh, both of which will also benefit.

An initiative of great importance for MIR is the MPEG7 international standard for multimedia content indexing and retrieval, which is being taken up by the music industry to an increasing extent. My colleague at City, Dr Michael Casey, is editor and co-chair of the MPEG7 audio group as well as a consultant for Mitsubishi Electrical Research, a member of MPEG7, which will be supporting music information retrieval in its development of a new generation of consumer devices.

The UK's Engineering and Physical Sciences Research Council (EPSRC) recently held a workshop on Music and Information Technology in which they made it clear that music was an important and challenging research area that they felt should be supported, owing to its great potential for creative, commercial and academic involvement as well as its acknowledged universality. We have recently been awarded a large EPSRC research grant to work together with colleagues from the Computer Science Department of King's College, London, on Algorithms for Music Retrieval and Analysis. This research will be directed towards the development, implementation and testing of novel and efficient methods to tackle the extremely interesting and demanding problems of computational music research in the context of realistic medium- to large-scale digital

corpora of music. It will involve work in both the audio and symbolic domains, and in the very difficult task of mapping between these domains. This requires both the use of sophisticated artificial intelligence techniques and computationally expensive feature extraction which may in turn demand the deployment of high-performance computing facilities such as those available at NCSA. Testing and system evaluation are of course seen as essential components of this research.

It is very clear to us that NCSA is endowed with all the necessary technical and infrastructural expertise to enable the creation of the first resource in the world for the properly evaluated development of high-quality MIR tools for a wide range of academic, commercial and educational applications. It is also clear that NCSA is almost, if not completely, unique in having that expertise. We very much hope you will be able to make this proposal a reality.

Yours sincerely,

Geraint A. Wiggins, MA, PhD
Head of Computing
City University, London