[Job] Postdoc researchers in music audio analysis and synthesis at Kyoto University

I'm happy to announce one or two postdoc positions available for one of the biggest research projects on music, entitled **"Building Foundations and Developing Applications for Next-Generation Media Content Ecosystem Technologies"** (Research Director: Dr. Masataka Goto) a.k.a. JST **OngaACCEL** project (ongaku (音楽) = music, onga (音画) = audio-visual), which consists of five research groups including

- AIST (Tsukuba, Japan): Research and development of both large-scale music analysis and synthesis technologies and content appreciation and creation support technologies (web services and platforms) [led by Masataka Goto]
- **Kyoto University (Kyoto, Japan): Research and development of large-scale music analysis and synthesis technologies [led by Kazuyoshi Yoshii]**

This project has just begun on August 2016 and is expected to continue until March 2021 (5 years). The successful candidate(s) will work with me (Kazuyoshi Yoshii), colleagues and students of the music team in the Speech and Audio Lab, and Dr. Goto if needed. A yearly contract can be renewed based on the achievements. Please forward this job offer to anyone who may be interested. Thank you.

Goal

The goal of the project is to contribute to developing the next-generation media content industry by building a service platform that utilizes content appreciation and creation technologies, thereby enabling various services such as content appreciation support services, and content creation support services to be realized.

Research

The core of this project is to enhance the automatic music-understanding technologies and establish foundational technologies that enable large-scale analysis and synthesis of diverse music content. In addition, we will develop foundational technologies that support content appreciation and creation by end users.

In this project and the previous project, AIST with the support of Kyoto University has developed the following web services:

- Songle (http://songle.jp): A music listening service that enables users to deeply understand music by analyzing and visualizing music structure (chorus sections), beat structure, melody line, and chords
- Songrium (http://songrium.jp): A music browsing assistance service that enables users to discover favorite music by analyzing and visualizing various relationships among songs
- TextAlive (http://textalive.jp): A lyrics animation production support service that enables users to animate lyrics in time to music by automatically synchronizing lyrics with music

The academic papers (not limited to music) are listed at:
http://sap.ist.i.kyoto-u.ac.jp/members/yoshii/publications_en.html

Preferred skills

- Deep knowledge or experience in some of the following domains:
  - Music analysis (tagging, similarity, recommendation, and retrieval)
  - Audio signal processing (separation, transcription, segmentation, and beat/chord estimation)
  - Natural language processing (grammar induction and topic modeling)
  - Machine learning (probabilistic/Bayesian modeling, matrix factorization, and deep learning)
  - Optimization (gradient descent methods, variational methods, and MCMC)
  - User interfaces and applications (mobile apps and computer-aided systems)
- Good writing skills for publishing the achievements in leading journals and conferences
- Strong interest in application of fundamental methods to music industry with big data
- Capacity to work in a team and develop good relationships with colleagues and students
- Good command of English

Additional skills

- Good programming skills in C++, Python, and/or Matlab
- Research/working experience with big data in academia or industry

Contract conditions

- Yearly contract (can be renewed every year based on the candidate's achievements)
- Place: Kyoto University (Yoshida-honmachi, Sakyo-ku, Kyoto, Kyoto 606-8501, Japan)
- Affiliation: Speech and Audio Processing Group (Prof. Tatsuya Kawahara's Lab), Department of Intelligence Science and Technology, Graduate School of Informatics, Kyoto University
  - http://sap.ist.i.kyoto-u.ac.jp/EN/
- Salary: 4,200,000 JPY (approx. 36,000 EUR or 40,000 USD) per year before taxes (this amount is subject to reevaluation based on the candidate's experience).
- Data: April 2017 (can be moved forward or backward flexibly)

Contact information

Interested applicants can contact Kazuyoshi Yoshii for asking more information or directly email a candidacy letter including a Curriculum Vitae, a list of publications and awards, and a statement of research interests (motivations, plans, ideas, or whatever).

- Kazuyoshi Yoshii (yoshii@kuis.kyoto-u.ac.jp)
- http://sap.ist.i.kyoto-u.ac.jp/members/yoshii/