Researcher position in speech modeling and transformation with deep neural networks (W/M) at Ircam Fixed-term contract of 12 months from June 1st, 2018

INTRODUCTION TO IRCAM:

IRCAM is a non-profit organization that is associated to the Centre Pompidou (Centre national d'art et de culture Georges Pompidou). Its missions comprise research, production, and education related to contemporary music and its relation to science and

technology. The scientific research is conducted in research teams that are part of the joined research lab STMS that gathers

researchers from IRCAM, the CNRS, and the Sorbonne University. IRCAM is located in the centre of Paris near the Centre

Pompidou, at 1, Place Igor Stravinsky 75004 Paris.

POSITION DESCRIPTION:

The position to be filled is located in the Analysis/Synthesis team and will be part of the research activities related to expressive

speech and singing voice transformation. Motivated by the recent success of deep learning technics for speech synthesis the

objective of the research is to investigate into means that allow exploiting deep learning strategies (transfer learning, GAN) for

speech transformation (transposition and intensity changes). The research should build on appropriate speech representations that

have been developed previously in the team, notably the shape invariant phase vocoder and a semi parametric speech glottal pulse

and noise model (PaN).

REQUIRED EXPERIENCES ET SKILLS:

Excellent knowledge of speech signal processing algorithms and practical experience with related to speech

transformation or speech synthesis.

Excellent knowledge of state of the art deep learning algorithms, and extensive experience with practical applications of

these algorithms.

Very proficient in Python (NumPY/SciPY), and extensive experiences with the tensorflow library.

Good knowledge of Linux, and/or Mac OS X.

High productivity, capacity for methodical and autonomous work, creativity, good communication skills, rigor, and

excellent programming style.

SALARY: According to background and experience.

APPLICATIONS:

Deadline for application: June, 1st, 2018

Please send an application letter before 1st of June 2018 together with your resume and any suitable information addressing the

above issues preferably by email to: roebel_at_ircam_dot_fr.