# Post-Doc Researcher Profile

<u>Topics</u>: Development and validation of advanced algorithms, with special attention to Machine Learning based solutions, for the following tasks: voice activity detection, speech enhancement, and speaker diarization. In particular, the application case study is focused on call-center communications, in which the suitable processing of the available single-channel recording should result in the separation of the vocal contributions of the operator and the customer, and in the correct detection of temporal boundaries in which the speakers are active.

<u>Pre-requisites</u>:
- PhD in Electronics Engineering, Telecommunications Engineering or Information Engineering or eventually in Mathematics or Physics
- Research experience in the field of Digital Audio Processing and Machine Learning. A solid background in Speech Processing is appreciated.
- Programming knowledge: Python, C/C++
- Competence in setup and usage of the Unix/Linux SW environment, and experience with Python libraries for Machine Learning (like Pytorch and Tensorflow)

The researcher is also expected to possess adequate skills of integration and cooperation with the members of the involved research groups, and also the ability to coordinate the work of other young researchers.

<u>Duration and starting date</u>: 21 months starting from Spring 2020.

<u>Work Location</u>: Università Politecnica delle Marche, Ancona, Italy. The researcher will tightly cooperate with the company PerVoice S.p.A. and the Fondazione Bruno Kessler, both located in Trento, Italy. Therefore, some working time will be spent in Trento. The possibility to work remotely is foreseen as well.

<u>Gross Salary</u>: 63.000 Euro for the entire contract duration (21 months).

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