Announcement of Post-doctoral Positions

Federal University of Ceará (UFC)
Department of Teleinformatics Engineering
Wireless Telecom Research Group (GTEL)
Fortaleza - Brazil

The post-doctoral positions will be housed at the Department of Teleinformatics Engineering at Federal University of Ceará (UFC), Fortaleza, Brazil, and will be initially funded for 1 year. The fellowship will be fully supported by the CAPES national agency (Brazilian Ministry of Education). Travel and installation expenses will be fully paid. Funding will be available from April 2020.

**Project 1**

The research project deals with the study of new algorithms for deep neural networks, with a particular focus on reducing the complexity of the learning process by resorting to tensor decompositions to model and factorize neural network structures. Topics include:

- Tensor decomposition based deep learning;
- Low-rank multilinear modeling of convolution neural nets.

**Requirements:** Doctoral degree in Computer Science or Electrical Engineering. Strong skills in signal processing and machine learning.

**How to Apply:**

Please submit the materials listed below electronically to André L. F. de Almeida andre@gtel.ufc.br

- Curriculum vitae with publications;
- 1 page research statement;

**Project 2**

The research project deals with the topics of channel estimation, space-time filtering, low-rank modeling, and tensor decompositions applied to multi-antenna communications assisted by intelligent reflective surfaces. Topics include:

- Matrix- and tensor-based signal processing algorithms for intelligent reflective surface (IRS) assisted MIMO communications;
- Low-rank modeling & filtering algorithms for large-antenna wireless transceivers.

**Requirements:** Doctoral degree in Electrical Engineering or a closely-related discipline. Strong skills in signal processing for communications.