

## Résumé of the curriculum vitae of Manuel Duarte Ortigueira

Manuel Duarte Ortigueira graduated in Electrical Engineering: Branch Telecommunications and Electronics at Instituto Superior Técnico (IST) of the Universidade Técnica de Lisboa, April 1975, and obtained the PhD and Habilitation degrees at the same Institution in 1984 and 1991, respectively. Nowadays he is an Associate Professor, with Habilitation, at the Electrical Engineering Department of the Faculty of Sciences and Technology of the Universidade Nova de Lisboa in the Signals and Systems area.

He initiated the teaching career in December 1972 at Instituto Superior Técnico, having taught 10 courses in 3 different graduations (Electrical and Computers Engineering, Computers and Computer Science Engineering and Computers and Aerospace Engineering) and 2 courses in the Master degree in Electrical and Computer Engineering. He taught at Escola Náutica Infante D. Henrique 2 courses of the graduation in Marine Electronic Systems Engineering. He is with the Faculty of Sciences and Technology of the Universidade Nova de Lisboa since 2001 having taught 4 courses of the graduation in Electrical and Computers Engineering, 1 of other graduations, 1 of the Master degree in Electrical and Computer Engineering, and 1 of the Integrated Master in Electrical and Computer Engineering. He participated in 4 curricular revisions, was responsible for the implementation of 1, participated in the organization of pedagogical journeys and published 4 administrative-pedagogic texts. From the strictly pedagogical point of view he published a book, 3 integral texts to cover the whole matter of 3 courses and more 6 texts corresponding to chapters of the syllabus and other small texts and presentations. He realized 7 video classes. 6 of them are available at the Moodle platform.

He participated in several courses of professional formation and promoted and coordinated 4. He was supervisor of 13 graduation projects, 7 Ms thesis, and 1 PhD thesis; he was co-supervisor of 3 Ms thesis and 1 PhD thesis. Presently he supervises 2 PhD students and co-supervises 3.

His research activity began in 1977 in the Centro de Análise e Processamento de Sinais, (CAPS) continued in the Instituto de Engenharia de Systems e Computadores (INESC), where he belonged to the groups of Digital Signal Processing and Systems of Signal Processing. In 1997, he began working at the Instituto de Desenvolvimento Novas Tecnologias (UNINOVA), where he is responsible for the Signal Processing group of the Centre for Technology and Systems. He published 40 papers in international journals with revision and has 1 accepted for publication. Other publications include 5 papers in national magazines, 83 in international conferences with revision of, at least, a summary, 3 chapters of

book besides several communications in panel and for invitation. He published the book "Fractional Calculus for Scientists and Engineers", Springer, Lecture Notes in Electrical Engineering. He is a regular reviewer of several international journals; he was a member of the Scientific Committee of 30 international conferences and was an invited publisher of 3 special numbers of the journal "Signal Processing ". He participated in 12 projects, 4 international, having been responsible for 2 national and a person in charge for the Portuguese participation in 1 international project. He has one registered patent. He belonged 8 juries of PhD and 13 of Ms degree. He was a member of the Executive Commission of the Department of Electrical and Computer Engineering, of the Assembly of Representatives and of the Pedagogic Council of the Instituto Superior Técnico and a member of the Pedagogic Commission of the Electrical and Computer graduation at the Faculty of Sciences and Technology. He prepared and published 1 book of the department of Electrical and Computer Engineering of the Instituto Superior Técnico.

Presently, his principal scientific interests consist of the next topics: Fractional Signal Processing, Digital Signal Processing, and Biomedical Signal Processing. In this particular case he has been working with Prof. Arnaldo Batista in ECG and EEG signal processing, mainly arrhythmia detection, spindle modelling, and sleep stage classification. We assembled a high resolution system for acquiring ECG and EEG.