

Preface of the “Symposium on Dependable Mechatronic Systems”

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Mechatronic Systems are systems used commonly in industry. The most important challenge that designers, developers and manufacturers of such systems deal is that they accomplish the main purposes for which they were developed. One of these main purposes is that those systems must behave as expected and they must be considered dependable systems. Some synthesis and analysis techniques can be used for this purpose.

In this symposium there are focused some aspects related with dependability of mechatronic systems. Aspects such as modeling, design, analysis, synthesis, control and interoperability of industrial mechatronic systems, as well application of those systems to added value domains like Health care or Ambient Assisted Living, are considered.

The organizer’s aim is to provide a venue where researchers, scientists, engineers and practitioners throughout the world can present and discuss the latest achievements and future directions to be followed in this domain.

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He received his PhD degree in Mechanical Engineering – Automation, from University of Minho, Portugal (and, in simultaneous, in École Normale Supérieure de Cachan, France) in 2006. He is Assistant Professor at Mechanical Engineering department of University of Minho. He has authored, or co-authored, more than 120 refereed journal and conference proceeding papers. He has coordinated several Research Projects on Mechatronics and Automation domains and his main interests are related with design and analysis of dependable controllers for obtaining dependable mechatronic systems. He has developed some research work on the domain of Ambient Assisted Living, mainly related with design of mechatronic devices for supporting quality of life of bedridden people. He is a frequent paper reviewer for several journals, including Journal of Process Control, Control

Engineering Practice, IEEE Transactions on Control Systems Technology and IEEE Transactions on Industrial Informatics. He is a member of IEEE and member of IFAC.