

PUBLIC SELECTION BASED ON QUALIFICATIONS AND INTERVIEW FOR THE AWARDING OF NO. 1 EARLY STAGE GRANT LASTING 12 MONTHS FOR CONDUCTING RESEARCH PURSUANT TO ART. 22 OF LAW NO. 240/2010 AT THE DEPARTMENT OF MANAGEMENT, ECONOMICS AND QUANTITATIVE METHODS (A.R.F. 09/H1 – INFORMATION PROCESSING SYSTEMS - A.D. ING-INF/05 – INFORMATION PROCESSING SYSTEMS (CUP: F52F16001340008) TYPE B

announced with decree of the Rector Rep. no. 566/2018 of 13.09.2018 and posted on the official registry of the University on 13.09.2018

RESEARCH PROJECT
“Quality of medical software and systems”

Research structure: Department of Management, information and production engineering

Duration of the grant: 12 months

Scientific Area: 09 - Industrial and information engineering

Academic recruitment field: 09/H1 – Information processing systems

Academic discipline: ING-INF/05 – Information processing systems

Scientific Director: Prof. Angelo Michele Gargantini

Software plays a role of increasing importance in the medical and health fields. It now has a critical function in many healthcare processes: from the sw included in embedded systems (such as pacemakers and dialysis devices) to the applications installed on the PCs of the doctors (for example for diagnosis registrations) and mobile applications on smartphones. Health depends on the correct functioning of this software of persons and their malfunctioning can cause serious damage (with consequences also in terms of responsibility). For this reason, in recent years there has been a growing attention to validation, testing and testing of medical software that also involves legal issues. The general objectives of the research fellowship are those of deepening the themes of the quality of medical software, at different technological levels: in embedded systems, in applications for personal use, in client-server systems, in web services, and in mobile applications. Particular emphasis will be given to the topic of combinatorial testing of medical software in collaboration with the University of Texas at Arlington.