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# Special issue on reliability, infocomm technology and business operations

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Today society is becoming ever more reliant on software and software-controlled systems. Some of this software is safety–critical, e.g., the software used to control cars, aeroplanes and other high-speed transport. Defects in such safety–critical software can lead to serious injury or death. A much larger volume of software is business-critical, e.g., software that runs in mobile phones, powers web servers and manages data centers. Defects in this type of software can lead to significant financial losses. Underpinning all of these areas is systems software: the low-level operating systems, device drivers and networking software on which complex systems are built. This foundational role means that the reliability of systems software is of primary importance.

The success of virtually every business today depends on certain indispensable factors like accurate analysis, choosing the right technology and the future vision. Research from the last two decades has proved that those organizations that do invest in technology and choose the path of innovation increase their market share, financial figures and overall competitiveness. Information technology is the only technology which provides us the opportunity to analyze specific data and plan the business journey accordingly. Virtually all industries e.g., automotive, avionics, oil, telecommunications, banking, semiconductors, pharmaceuticals are highly dependent on computers for their basic functioning. Are we embedding potential disasters while we embed software into systems? With processors and software permeating safety critical embedded world, the reliability of software is of utmost importance.

Structuring complex problems well and considering multiple criteria explicitly lead to more informed and better decisions. There have been important advances in this field since the start of the modern multiple-criteria decision-making discipline in the early 1960s. A variety of approaches and methods, many implemented by specialized decision-making software have been developed for their application in an array of disciplines, ranging from politics and business to the environment and energy.

This special issue on ''Software Reliability, Infocomm Technology and Business Operations'' is compilation of the short listed papers of the International Conference on Quality, Reliability, Infocomm Technology and Business Operations (ICQRITBO'2015) held during Dec. 28–30, 2015 in Delhi University Delhi, India.

This special issue contains papers on Software Testing, Reliability Analysis, Multi Criteria Decision Making, Project Management, Railway Maintenance, Warranty Analysis and Release Time Problem. The guest editors are grateful to various authors who have made significant contributions and could present their papers in the ICQRITBO'2015.

The guest editors are grateful to several reviewers for their comments and suggestions which helped in improving quality of the papers. We hope that this issue makes significant contributions in the field of Software Reliability, IT and Business Operations. We acknowledge International Journal of Systems Assurance Engineering and Management (IJSAEM) for their kind support and help in bringing out this special issue.

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