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Call for Papers
Special Issue on Green Grid Computing with Intelligent Mechanisms

The enormous growth in networking and the availability of powerful computers are changing the way of computing and managing information and information services. Grid Computing, the new technological paradigm that emerged has significant challenges regarding conceptual and implementation models, infrastructure and services, resource management, networking, and security. With the revolutions in science and the drastic advancement in computing, communication and storage capability, Grid Computing emerged as a boom for wide-area distributed computing. The main objective of Grid Computing is to provide a service-oriented infrastructure that enables pervasive access and coordinates geographically distributed resources. This also leads to autonomic self-managing behaviours. The aggregation, integration and interaction of the distributed resources conceived advancements in applications that solve complex scientific and engineering problems. Recently sustainable environmental technology requires grid computing as green grid computing.

Grid technology provides scalable and secured mechanisms for providing access to remote resources. This technology has transformed the impossible into possible by enabling an unprecedented scale of sharing resources and also enabling geographically distributed teams to work together. In spite of acknowledging the advances of this technology, research in various domains is required to widen the application and scope of grid computing. Reconfigurable architectures gain performance and energy for high-performance applications. High-end computing and data-driven Artificial Intelligence computing bring application-specific grid computing technology into the high-end computing world. Grid computing is visioned towards uniform and controlled access to computing resources scaling from personal digital assistants (PDAs) to enterprise based open-ended global grid environment. The visions of grid computing have generalized the grid resources into services. These grid services allow grids, and their applications enable to transit of dynamically composed services.

The overall goal of the special issue is to integrate researchers and developers in the forefront of parallel and distributed system software for high end distributed computing. Topics of interest are focused on advancements in Grid Computing, including but not being limited to:

- Grid deployments and applications
- Development tools and compilation techniques for Grid Computing
- Grid technology in optical and wireless infrastructures
- Smart grids and sustainable energy
- AI techniques for distributed and grid computing
- Vehicle to Grid (V2G) technology
- Grid middleware, scheduling, brokering, and monitoring
- Combating global terrorism with the worldwide grid
- Future of grid, trends, and challenges
- Green data centres

- Bio-inspired grid resource management
- Grid services, concepts, specifications, and frameworks
- Efficient and high-performance virtualization and other management mechanisms for high-end computing

Important Dates:

Submission deadline:	28 February 2023
First round of revision:	10 April 2023
Revised version submission:	15 May 2023
Final Decision:	30 June 2023

The correspondence with ROMJIST including the paper submission will be carried out using the address romjist@nano-link.net respecting the instructions for authors specific to ROMJIST posted at
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