

## Editorial Special Issue on Recent Advances in Artificial Intelligence for Smart Manufacturing – Part II Intelligent Automation & Soft Computing

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Smart manufacturing, also known as Industry 4.0, refers to the next-generation manufacturing paradigm that aims to make use of smart sensors, cloud computing infrastructures, artificial intelligence or machine learning, advanced robotics to improve manufacturing productivity and cost efficiency. As one of the key enablers for smart manufacturing, the Internet of Things (IoT) enables integration of physical objects with digital systems by offering connectivity of manufacturing devices and systems through sensors or augmented reality. Due to the arrival of big data, Internet of Things, cyber-physical systems, cloud manufacturing, and so on, manufacturing is in the process of undergoing a significant transformation to become more intelligent and automated. More strikingly, various artificial intelligence techniques, machine learning algorithms, and big data analytics are researched and being deployed into remanufacturing context, e.g., design for remanufacturing, advanced remanufacturing process, robotics in manufacturing, critical failure prediction, inventory forecasting, resilient manufacturing networks, closed-loop supply chain management, etc. The purpose of this SI is to provide a forum for researchers and practitioners to exchange ideas and progress in related areas. The special issue is divided in to two parts. This editorial is the second part of the SI.

Based on the concrete sailing parameters of the own vessel and the target vessel demarcate and the division of stages of vessel collision avoidance, the deterministic vessel automatic collision avoidance strategy evaluation model is constructed by Liu et al. [1] through the relevant factors which influence ships encounter dangerous situation. Hou et al. [2] used the density peak clustering to determine the cluster centers of various categories of images, and took it as the target spectrum, and took the clustering results as the ground data. Two methods of HUD and OSP were used to detect the image, and the correlation coefficients of the spectrum of each cluster center and the mineral spectrum of the spectral library were obtained. Zhi and Liu [3] proposed a hybrid algorithm, which is embedding the genetic operators in the global-best-guided artificial bee colony algorithms called GABC-GA to solve the nonlinear design optimization problems. Cang and Peng [4] applied the multibody system kinematics principle and the homogeneous coordinate transformation to infer the final pointing error formula which influences the three-axis error model of the Mobile Lidar. A new model is proposed by Zhao [5] to predict the permeability of porous media. This model introduces the Euler-Poincaré Characteristic (Euler Number), a parameter that reflects the connectivity of porous media. Du [6] analyses the current situation of large data security risk,

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#### 2 XU, ZHOU, and YAN

discusses the supervision principle, supervision law of data security, right relief mechanism and supervision auxiliary mode, including the regulation of self-discipline organization of the industry, the introduction of credit system and so on, in order to build an effective personal data security supervision system and standardize the operation of the using personal data in whole industry. A space payload cabinet is introduced by Luo et al. [7] and the damping design is carried out by applying constrained viscoelastic damping layer to the surfaces of the cabinet to ensure that the space payloads can withstand the above-mentioned mechanical environmental conditions. The key process of deriving the diameter ratio of each layer wires was formulated by Yu and Dong [8] into a one-dimensional problem and golden section method was applied to solve the problem efficiently.

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ION AND SOFT COMPUTING 3

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