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Author: Mr. Han Yonggen

Science and Technology on Space Physics Laboratory, China, robinhyg@163.com

Mr. Zhang Pengyu

Science and Technology on Space Physics Laboratory, China, bennyhit@126.com

Mr. Cheng Pu

Science and Technology on Space Physics Laboratory, China, chengpu04@163.com

Mr. Huang Xingli

Science and Technology on Space Physics Laboratory, China, hxl1972@sina.com

DATA MINING TECHNOLOGY USES IN AEROSPACE INTEGRATED APPLICATION

Abstract

In recent years, the technology of data mining is becoming subjects of major interest in the Internet and IT industry, as the amount of data in these areas increased hugely. These huge data are difficult to be understood intuitively by human and imminently need to be transferred to useful information, which are helpful for making correct decision. Nowadays, with the increasing of aerospace activity and advancement of measuring technology, all kinds of measuring data also increase hugely and need data mining technology to improve understanding capability. This paper focuses on the huge data produced by aerospace simulation, flight measurement and earth observation etc. The contradiction between excessiveness of data and deficiency of method for information extraction is pointing out and some intelligent data mining technology successfully applied in aerospace areas are introduced, including multi-object optimization of reentry vehicle, virtual sensor for earth observation and anomaly detection of space vehicle. Finally, the promising prospects of intelligent data mining technology in aerospace are presented and the problems faced are also given.