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研究課題名（和文）分散型ルールベースシステムにおける処理割り当て方式

研究課題名（英文）A Process Assignment Method in Distributed Rule-Based Systems

研究代表者

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研究成果の概要（和文）：本事業では、分散型ルールベースシステムにおけるルール処理および処理結果のより細かい割り当て方式を提案し、構築技術の確立を目的とする。分散型ルールベースシステムにおける想定環境や問題設定をモデル化し、処理割り当て方式について対外発表を行った。また、ルールベースシステムにおいて重要なセンサデータの収集や管理、処理の分散手法を確立し、多くの学術論文誌や国際会議、国内研究会などで成果を発表した。

研究成果の学術的意義や社会的意義

ルール処理効率化のためのアルゴリズムを分散環境に適用し、ルール処理やセンサデータ収集頻度を削減しつつ、複数コンピュータによる負荷分散を図る。提案するルール処理割り当て方式により、分散型ルールベースシステムにおける特定の処理コンピュータへの負荷集中を回避できる。本研究により、インターネットおよび広域なセンサデータを用いた大規模ルールベースシステムが実現できる。

研究成果の概要（英文）：This research aims to propose a process assignment method in distributed rule-based systems and establish its construction technique. I modeled the assumed environment and problems in distributed rule-based systems, and I made presentations about the proposed process assignment method. In addition, also I proposed distributed methods to collect, manage, and process sensor data which perform an important role in rule-based systems. The contributions in this research were presented in many academic journals, international conferences, domestic symposiums, and so on. The presentations contain technical demonstrations.

研究分野：分散コンピューティング

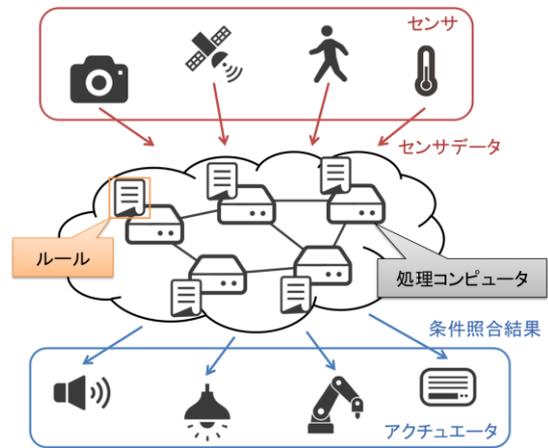
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