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4.3.3 Analysis4.4 Dead-Reckoning for a Team of Robots; 4.4.1 Partitioning; 4.4.2 Program Design; 4.4.3 Analysis; 4.4.4 Local and Global Buffers; 4.5 Summary; References; 5. Sensors; 5.1 Transforming Sensor Readings; 5.1.1 Partitioning: Single Robot Location; 5.1.2 Analysis; 5.1.3 Partitioning: Multiple Robot Locations; 5.1.4 Analysis; 5.2 Drawing a Map from Sonar Data; 5.2.1 Finding Straight Lines with the Hough Transform; 5.2.2 Partitioning; 5.2.3 Program Design; 5.2.4 Analysis; 5.2.5 Load Balanced Hough Calculation; 5.2.6 Analysis; 5.3 Aligning Laser Scan Measurements
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Sommario/riassunto

In this book, we look at how cluster technology can be leveraged to build better robots. Algorithms and approaches in key areas of robotics and computer vision, such as map building, target tracking, action selection and landmark learning, are reviewed and cluster implementations for these are presented. The objective of the book is to give professionals working in the beowulf cluster or robotics and computer vision fields a concrete view of the strong synergy between the areas as well as to spur further fruitful exploitation of this connection. The book is written at a level appropriate for a