



# Resource-Aware Data Fusion Algorithms for Wireless Sensor Networks [

Abdelgawad, Ahmed

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Engineering Algorithms Systems engineering Engineering Circuits  
and Systems Signal, Image and Speech Processing Algoritmos

Monografía

This book introduces resource-aware data fusion algorithms to gather and combine data from multiple sources (e.g., sensors) in order to achieve inferences. These techniques can be used in centralized and distributed systems to overcome sensor failure, technological limitation, and spatial and temporal coverage problems. The algorithms described in this book are evaluated with simulation and experimental results to show they will maintain data integrity and make data useful and informative. Describes techniques to overcome real problems posed by wireless sensor networks deployed in circumstances that might interfere with measurements provided, such as strong variations of pressure, temperature, radiation, and electromagnetic noise; Uses simulation and experimental results to evaluate algorithms presented and includes real test-bed; Includes case study implementing data fusion algorithms on a remote monitoring framework for sand production in oil pipelines

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### **Baratz Innovación Documental**

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- [informa@baratz.es](mailto:informa@baratz.es)