

Referências bibliográficas

ALIPPI C, FERRARI S., PIURI V., SAMI M., and SCOTTI F. (1999), **New Trends in Intelligent System Design for Embedded and Measurement Applications**, IEEE Instrumentation and Measurement Magazine, Vol. 2, N° 2, pp: 36-44.

ANDRIA G., ATTIVISSIMO F., GIAQUINTO N. (2001), **Digital signal processing techniques for accurate ultrasonic sensor measurement**, Measurement, Vol. 30, pp: 105-114.

ANGRISANI L., BACCIGALUPI A., MORIELLO R.S. (2006), **A Measurement Method Based on Kalman Filtering for Ultrasonic Time-of Flight Estimation**, IEEE Transactions on Instrumentation and Measurement, Vol. 55, pp: 442-448, N° 2.

ANNAMARIA R., DOBROWIECKI T.P. and PECELI G. (1997), **Measurement Uncertainty: A Soft Computing Approach**, IEEE Conference on Intelligence Engineering Systems, pp: 485-490.

AYYUB B.M. and KLIR G.J. (2006), **Uncertainty Modeling and Analysis in Engineering and the Sciences**, Chapman & Hall.

BOBJANOVA S. (2006), **Median Alpha-Levels of a Fuzzy Number**, Fuzzy Sets and Systems, Vol. 157, pp: 879-891.

CATUNDA S.Y.C., PESSANHA J.E.O., Fonseca Neto J.V., CAMELO N. and SILVA P.R.M. (2004), **Uncertainty Analysis for Defining a Wind Power Density Measurement System Structure**, IEEE Instrumentation and Measurement, Vol. 2, pp: 1043-1047.

CIRES J., ROMO P.A. and ZUFIRIA P. (1995), **Comparative Analysis of Some Neural Network Architectures for Data Fusion**, IEEE Conference on Neural Networks, Vol. 1, pp: 79-83.

DHILLON B.S. (1999), **Design Reliability Fundamentals and Applications**, CRC Press.

DO COUTTO M.B., STACCHINI J.C., SCHILLING M. (2007), **Sobre o problema da integração generalizada de dados**, Revista Controle & Automação, Vol. 18, N° 1, pp: 24-43.

DUBOIS D., PRADE H. and YAGER R.R. (1998), **Computation on Intelligent Fusion Operations Based on Constrained Fuzzy Arithmetic**, Conference on Fuzzy Systems Proceedings, Vol. 1, pp: 767-772.

FACELI K. (2001), **Combinação de Métodos de Inteligência Artificial para Fusão de Sensores**, Dissertação de Mestrado em Ciências da Computação e Matemática Computacional, Universidade de São Paulo - Brasil.

FACELI K., CARVALHO A.C.P.L.F and REZENDE S. (2004), **Combining Intelligent Techniques for Sensor Fusion**, Journal on Applied Intelligence, Vol. 20, N° 3, pp: 199-213.

FERRERO A. and SALICONE S. (2006), **Measurement Uncertainty – Part 8 in a series of tutorials in instrumentation and measurement**, IEEE Instrumentation & Measurement Magazine, Vol. 9, N° 3, pp: 44-51.

FERRERO A., SALICONE S. (2007), **An Original Fuzzy Method for the Comparison of Measurement Results Represented as Random-Fuzzy Variables**, IEEE Transactions on Instrumentation and Measurement, Vol. 56, N° 4.

FOWLER K.R., SCHMALZEL J. (2004), **Why do we care about measurement?**, IEEE Instrumentation & Measurement Magazine, Vol. 7, pp: 38-46.

GASJKI D., VAHID F., NARAYAN S. and GONG JIE. (1994), **Specification and Design of Embedded Systems**, Prentice-Hall.

- GEE W.N. (2003), **Intelligent Systems-Fusion, Tracking and Control (CSI: Control & Signal/Image Processing)**, Research Studies Press LTD.
- GRIMALDI U., PARVIS M. (1995), **Enhancement Ultrasonic Sensor Performance by Optimization of Driving Signal**, Measurement, Vol. 14, pp: 219 – 228.
- GUETBI C., KOUNAME D., OUAHABI A., CHEMLA J.P., BENZAADA L. (1998), **Flow Velocity Estimation using Ultrasound Signals and Wavelet Transformation**, IEEE Industrial Electronics Society, Vol. 3, pp: 1366 – 1369.
- GUM (1993), **Guide to the Expression of uncertainty in Measurement**. Disponível em: www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=45315.
- HALL D.L. and McMullen S.A.H. (2004), **Mathematical Techniques in Multisensor Data Fusion**, Second Edition, Artech House, INC.
- HALL B.D. (2005), **Propagating Uncertainty in Instrumentation Systems**, IEEE Transactions on Instrumentation and Measurement, Vol. 54, N° 6, pp: 2376-2380.
- HANSS M. (1999), **On the Implementation of Fuzzy Arithmetical Operations for Engineering Problems**, Conference on Fuzzy Information Processing, pp: 462-466.
- HAUPTMANN P., HOPPE N., PUETTMET A. (2001), **Ultrasonic Sensors for Process Industry**, IEEE Ultrasonic Symposium, Vol. 1, pp: 369–378.
- HUGLES T. (2000), **Environmental Verification and Analysis Center**, Lesson Number 3: Wind power Tutorial Series, The University of Oklahoma. Disponível em: www.seic.okstate.edu/owpi_old/about/Library/Lesson3_WPD_windclass.pdf
- INMETRO (2007), **Vocabulário Internacional de Termos Fundamentais e Gerais de Metrologia – VIM**, 5ta Edição.
- KAIMAL J.C., BUSINGER J.A. (1963), **A Continuous Wave Sonic Anemometer-Thermometer**, Journal of Applied Meteorology, Vol. 2, N° 1, pp: 156-164.
- KELLY G. (1999), **Data Fusion: From primary metrology to process measurement**, IEEE Instrumentation and Measurement, Vol. 3, pp: 1325-1329.
- KOLLAR L. (1994), **Bias of Mean Value and Mean Square Value Measurements based on Quantized Data**, IEEE Transactions on Instrumentation and Measurement, Vol. 43, N° 5, pp: 733-739.
- LALLA M., FACCHINETTI G. and MASTROLEO G. (2008), **Vagueness Evaluation of the Crisp Output in a Fuzzy Inference System**, Fuzzy Sets and Systems, Vol. 159, pp: 3297-3312.
- LIMA S.L.P. and EBECKEN N.F.F. (2000), **A comparison of models for uncertainty analysis by the finite element method**, Finite Elements in Analysis and Design, Vol. 34, pp: 211-232.
- LUO R., YIH CH. and SU L. (2002), **Multisensor Fusion and Integration: Approaches, Applications, and Future Research Directions**, IEEE Sensors Journal, Vol. 2, N° 2, pp: 107-119.
- MAHAJAN A., WANG K. and RAY P.K. (2001), **Multisensor Integration and Fusion Model that uses a Fuzzy Inference System**, IEEE/ASME Transactions on Mechatronics, Vol. 6, N° 2, pp: 188-196.
- MAURIS G., BERRAH L, FOULLOY L., and HAURAT A. (2000), **Fuzzy Handling of Measurement Errors in Instrumentation**, IEEE Transactions on Instrumentation and Measurement, Vol. 49, N° 1, pp: 89-93.
- MAURIS G., LASSERRE V. and FOULLOY L. (2001), **A Fuzzy Approach for the Expression of Uncertainty in Measurement**, Measurement, Vol. 29, pp: 165-177.

- MAYBECK P.S. (1997), **Stochastic Models, Estimation, and Control**, Vol. 1, Mathematics in Science and Engineering Series.
- McKERRROW P.J. and VOLK S.J. (1996), **A Systems Approach to Data Fusion**, IEEE Data Fusion Symposium, pp: 217-222.
- MENDEL J.M. and WU D. (2007), **Cardinality, Fuzziness, Variance and Skewness of Interval Type-2 Fuzzy Sets**, IEEE Foundations of Computational Intelligence, pp: 375-382.
- MINKOFF J. (2001), **Signal Processing Fundamentals and Applications for Communications and Sensing Systems**, Artech House.
- MOORE R.E. (1995), **Methods and Applications of Interval Analysis**, SIAM 2° Edition.
- MORAWSKI R.Z. (1994), **Unified approach to measurand reconstruction**, IEEE Transactions on Instrumentation and Measurement, Vol. 43, N° 2, pp: 226-231.
- MORAWSKI R.Z. (2004), **Digital signal processing in measurement microsystems**, IEEE Instrumentation & Measurement Magazine, Vol. 7, N° 2, pp: 43-50.
- O'HAGAN M. (1990), **Using Maximum Entropy-Ordered Weighted Averaging to Construct a Fuzzy Neuron**, Conference on Signals System Comput, pp: 618-623.
- PÀLLAS-ARENY R., WEBSTER J. (2001), **Sensors and Signal Conditioning**, 2nd Edition, John Wiley and Sons.
- PEDRYCZ W. and GOMIDE F. (2007), **Fuzzy Systems Engineering: Toward Human-Centric Computing**, Wiley – IEEE Press.
- PERTILE M. and DE CECCO M. (2008), **Uncertainty Evaluation For Complex Propagation Models by Means of the Theory of Evidence**, Measurement Science and Technology, Vol. 19, pp: 10.
- PROAKIS J.G., MANOLAKIS D.G. (1995), **Digital Signal Processing: Principles, Algorithms and Applications**, Prentice Hall, 3ra Edition.
- REZNIK L., DABKE K.P. (2004), **Measurement models: application of intelligent methods**, Measurement, Vol. 35, pp: 47-58.
- RUSSO F. and RAMPONI G. (1994), **Fuzzy Methods for Multisensor Data Fusion**, IEEE Transactions on Instrumentation and Measurement, Vol. 43, N° 2, pp: 288-294.
- SALICONE S. (2007), **Measurement Uncertainty: An Approach via the Mathematical Theory of Evidence**, Springer Series in Reliability Engineering.
- SVILAINIS L. and DUMBRAVA V. (2008), **Sampling Parameters Optimization of the Data Acquisition for Ultrasonic Time of Flight Measurements**, IEEE Information Technology Interfaces, pp. 785-790.
- TAYLOR J.R. (1997), **An Introduction to Error Analysis the Study of Uncertainties in Physical Measurement**, 2nd Ed. Sausalito, Calif. University Science Books.
- TONG C. and FIGUEROA J. F. (2002), **Guidelines for the use of ultrasonic non-invasive metering techniques**, Flow Measurement and Instrumentation, Vol. 13, pp: 125-142.
- VASEGHI S.V. (2000), **Advanced Digital Signal Processing and Noises Reduction**, John Wiley & Sons Ltd, 2° Edition
- VILLANUEVA J.M., CATUNDA S.Y.C., TANSCHKEIT R. and PINTO M.M.S. (2007a), **Wind Speed Measurement Data Fusion of Phase Difference and Time-of-Flight Techniques Using Ultrasonic Transducers**, IEEE Conference on Instrumentation and Measurement, pp: 1-6, Warsaw, Poland.
- VILLANUEVA J.M., TANSCHKEIT R., CATUNDA S.Y.C. (2007b), **Análise de Incertezas e Fusão de Dados Baseada em Aritmética Fuzzy para Medição da Velocidade do Vento**

Utilizando Transdutores Ultrasônicos, Simpósio Brasileiro de Automação Inteligente, VIII SBAI, Florianópolis, Brasil.

VILLANUEVA J.M., CATUNDA S.Y.C., TANSCHKEIT R. (2007c), **Análise de Incertezas de Duas Estruturas para Medição de Velocidade do Vento Usando Sensores Ultrasônicos**, Seminário Internacional de Metrologia Elétrica, VII Semetro, Minas Gerais, Brasil.

VILLANUEVA J.M., CATUNDA S.Y.C., TANSCHKEIT R. (2008), **Data Fusion Methods based on Fuzzy Theory for Wind Speed Measurement using Ultrasonic Transducers**, IEEE International Instrumentation and Measurement Technology Conference, pp: 1140-1145, Victoria, Canada.

VOXMAN W. (1998), **Some Remarks on Distances Between Fuzzy Numbers**, Fuzzy Sets and Systems, Vol. 100, pp: 353-365.

WANG Y. and GOODMAN S.D. (1994), **Data Fusion with Neural Networks**, IEEE Conference on Systems, Man, and Cybernetics, Vol. 1, pp: 640-645.

WEBSTER J.G. (1999), **Measurement, Instrumentation and Sensors Handbook**, CHAPMAN & HALL/CRC Press.

YAGER R.R. and KELMAN A. (1996), **Fusion of Fuzzy Information with Considerations for Compatibility, Partial Aggregation, and Reinforcement**, International Journal of Approximate Reasoning, Vol. 15, pp: 93-122.

YEH T., ESPINA P.I., OSELLA S.A. (2001), **An Intelligent Ultrasonic Flow Meter for Improved Flow Measurement and Flow Calibration Facility**, IEEE Instrumentation and Measurement Technology Conference, Vol. 3, pp: 1741-1746.

ZHANG Z., WANG Q., SUN S. (1999), **A new fuzzy neural network architecture for multisensor data fusion in non-destructive testing**, IEEE Fuzzy Systems Conference Proceedings, Vol. 3, pp: 1661-1665.