

## **UNCERTAINTY ANALYSIS OF STRAIN GAGE CIRCUITS: INTERVAL METHOD AND INTERVAL ALGORITHM**

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**Abstract-** This paper presents uncertainty analysis of a strain gage based instrumentation systems. This has been carried out by interval method and classical methods and is verified by the mean value algorithm based on interval arithmetic. The quarter, half and full bridge configuration of strain gage based circuits are considered to illustrate the analysis.

**Index terms:** Interval analysis, Uncertainty analysis, Strain gages, Interval Optimization