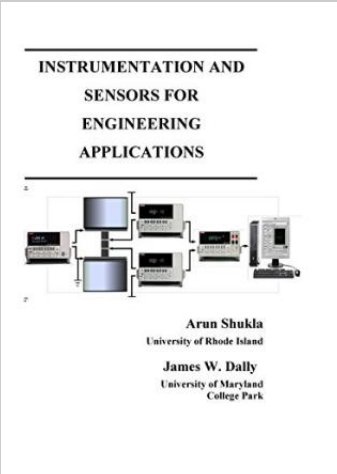

Instrumentation and Sensors for Engineering Applications (Paperback)

By Arun Shukla, James W Dally

College House Enterprises, LLC, United States, 2016. Paperback. Condition: New. Language: English. Brand new Book. The first four chapters provide the foundation for understanding circuits, analog and digital signals, measurement systems and instruments for measuring voltage. Chapter 1 is an introduction to applications of measurement systems, where engineering measurements and process control are described. Chapter 2 provides methods for analysis of circuits. It includes a brief review of electrical and electronic principles important in understanding the operation of instrument systems. Chapter 3 covers digital recording systems and contains detailed descriptions of the analog-to-digital and digital-to-analog conversion processes. Chapter 4 gives a detailed description of potentiometer and Wheatstone bridge circuits, which condition sensor output. Also included is a treatment of several types of amplifiers and filter circuits. Chapters 5 through 10 deal with methods for measuring many different mechanical quantities. Chapter 5 describes sensors for measuring displacement and velocity of an object when a fixed reference for mounting the sensor is available. Optical methods including interferometers and digital image correlation have been added to this coverage. Chapter 6 provides an extensive treatment on the measurement of strain. It includes signal condition circuits, recording instruments, calibration methods, lead wire effects, electrical noise...

Reviews

Absolutely essential read publication. it absolutely was writtern very completely and valuable. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- ***Sarai Lebsack***

Thorough guide for book enthusiasts. I am quite late in start reading this one, but better then never. Your lifestyle span will be transform when you total reading this article book.

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