

Designing Telemetric Data Acquisition System For Clinical Studies

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Abstract

This paper presents a systematic approach to design a PC-based telemetric data acquisition system for clinical studies. This involves understanding signal characteristics, signal pick-up devices, mechanism to transfer signal telemetrically, and other data acquisition hardware components. Most of the clinical studies involve capturing and processing biological signals like cough, sneeze, snore, and pain. A PC-based telemetric data acquisition could be an excellent solution for monitoring and analyzing these signals, which help in quantifying the effect of a particular drug used in a clinical study.

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Mr. Rawat received the Bachelor degree in Electronics Engineering from Bombay University, India, in 1997, and the Master Degree in Computer Science from University of Louisiana at Lafayette, in 2001. He also worked for two years in the R&D division of Procter & Gamble in Bombay, India. He is currently working toward his Master Degree in Computer Engineering at Center for Advanced Computer Studies (CACS), University of Louisiana at Lafayette. Mr. Rawat is a member of IEEE, NAIT and ASEE.

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Dr. Massiha has ten years of full-time faculty teaching experience. His areas of expertise are in experimental and theoretical microelectronics, VLSI, microprocessor and control systems, and solar energy research. He has designed, built and investigated VLSI, IC semiconductor devices, and electronic circuits for reliability measurements.