

Real-time Rate and Rhythms Feedback Control System in Patients with Atrial Fibrillation

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Abstract : Capturing the dynamic behavior of the heart to improve control performance, enhance robustness, and support diagnosis is very important in establishing real time models for the heart. Control Techniques and strategies have been utilized to improve system costs, reliability, and estimation accuracy for different types of systems such as biomedical, industrial, and other systems that required tuning input/output relation and/or monitoring. Simulations are performed to illustrate potential applications of the technology. In this research, a new control technology scheme is used to enhance the performance of the Af system and meet the design specifications.

Keywords : atrial fibrillation, dynamic behavior, closed loop, signal, filter

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