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Nota di contenuto	Novel Contributions of Neuroergonomics and Cognitive Engineering to Population Health -- A Cross-Sectional Study Using Wireless Electrocardiogram to Investigate Physical Workload of Wheelchair Control in Real World Environments -- Association Between Physicians' Burden and Performance During Interactions with Electronic Health

Records (EHRs) -- Beyond Physical Domain, Understanding Workers Cognitive and Emotional Status to Enhance Worker Performance and Wellbeing -- Performance and Brain Activity During a Spatial Working Memory Task: Application to Pilot Candidate Selection -- Using fNIRS and EDA to Investigate the Effects of Messaging Related to a Dimensional Theory of Emotion -- Brain Based Assessment of Consumer Preferences for Cognition Enhancing Hot Beverages.

Sommario/riassunto

This book offers a broad perspective on the field of cognitive engineering and neuroergonomics, covering emerging practices and future trends toward the harmonious integration of human operators and computer systems. It presents novel theoretical findings on mental workload and stress, activity theory, human reliability, error and risk, and neuroergonomic measures alike, together with a wealth of cutting-edge applications. Further, the book describes key advances in our understanding of cognitive processes, including mechanisms of perception, memory, reasoning, and motor response, with a special emphasis on their role in interactions between humans and other elements of computer-based systems. Based on the AHFE 2019 affiliated conference on Neuroergonomics and Cognitive Engineering, held on July 24-28, 2019, in Washington D.C., USA, it provides readers with a comprehensive overview of the current challenges in cognitive computing and factors influencing human performance. .