Biomedical Engineering and Cognitive Neuroscience for Healthcare: Interdisciplinary Applications

Jinglong Wu (Okayama University, Japan)

New developments in medical technology have paved the way for the ongoing studies of cognitive neuroscience and biomedical engineering for healthcare. Their different but interconnected aspects of science and technology seek to provide new solutions for difficult healthcare problems and impact the future of the quality of life.

**Biomedical Engineering and Cognitive Neuroscience for Healthcare: Interdisciplinary Applications** brings together researchers and practitioners, including medical doctors and health professionals, to provide an overview of the studies of cognitive neuroscience and biomedical engineering for healthcare. This book aims to be a reference for researchers in the related field aiming to bring benefits to their own research.

**Topics Covered:**

- Biomechatronics and Healthcare
- Biomedical Image Processing
- Biomedical Robotics for Healthcare
- Cognitive Neuroscience and Healthcare
- Cognitive Science and Healthcare
- EEG/ERP Cognitive Neuroscience and Healthcare
- Imaging Cognitive Neuroscience and Healthcare
- Mental Health
- Sustainable Materials and Techniques in Healthcare
- Technology in Rehabilitation

**Market:** This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Jinglong Wu was born in Jiutai, China on August 8, 1958. He received a B.S. from Jilin Vocational Teachers College, China and M.S. from Kyoto University, Japan, both in electrical engineering in 1984 and 1991. He received his Ph.D. in electric engineering from Kyoto University, Japan in 1994. He was an assistant professor at Ritsumeikan University, Japan from 1994 to 1997, a lecturer in the Department of Mechanical Engineering, Faculty of Engineering, Yamaguchi University from 1997 to 1999. From 1999 he was an associate professor and from 2002 he was a full professor in the Department of Intelligent Mechanical Systems, Faculty of Engineering, Kagawa University, Japan. Since 2008, he has been Professor and Laboratory Head of Biomedical Engineering Laboratory, Graduate School of Natural Science and Technology, Okayama University, Japan. His current research interests are biomedical engineering, cognitive neuroscience, ergonomics, and human science. Dr. Wu received the Best Paper Award of the IEEE Joint International Conference on Neural Network in 1993 and the SICE Best Paper Award in 2000. In 2003, he received the Gennai Grand Prize, Ozaki Foundation, Japan.
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