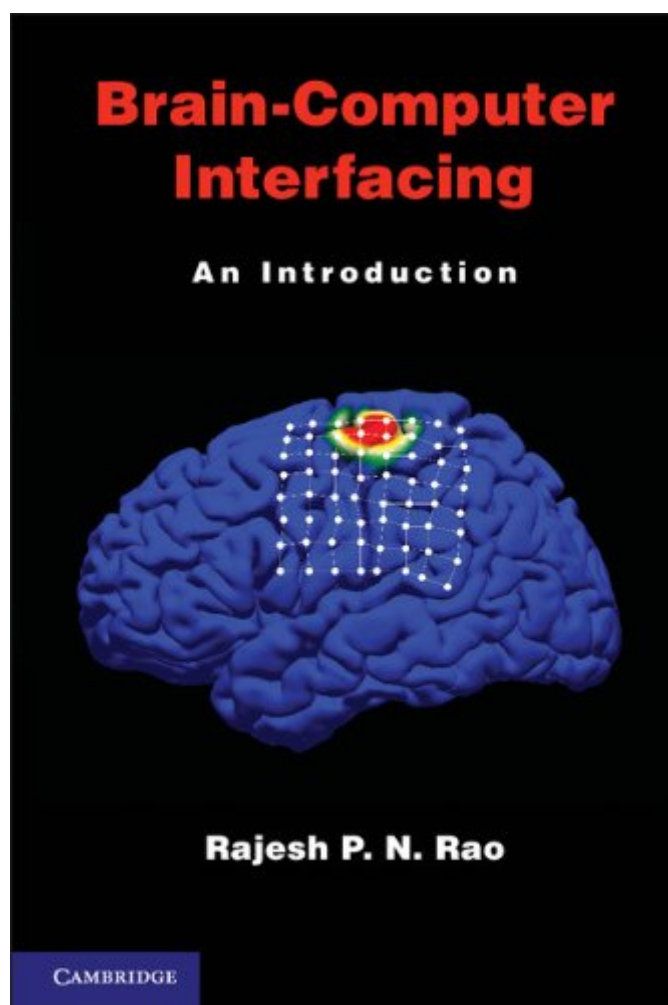


The book was found

# Brain-Computer Interfacing



## Synopsis

The idea of interfacing minds with machines has long captured the human imagination. Recent advances in neuroscience and engineering are making this a reality, opening the door to restoring and potentially augmenting human physical and mental capabilities. Medical applications such as cochlear implants for the deaf and deep brain stimulation for Parkinson's disease are becoming increasingly commonplace. Brain-computer interfaces (BCIs) (also known as brain-machine interfaces or BMIs) are now being explored in applications as diverse as security, lie detection, alertness monitoring, telepresence, gaming, education, art, and human augmentation. This introduction to the field is designed as a textbook for upper-level undergraduate and first-year graduate courses in neural engineering or brain-computer interfacing for students from a wide range of disciplines. It can also be used for self-study and as a reference by neuroscientists, computer scientists, engineers, and medical practitioners. Key features include:

- Essential background in neuroscience, brain recording and stimulation technologies, signal processing and machine learning
- Detailed description of the major types of BCIs in animals and humans, including invasive, semi-invasive, noninvasive, stimulating and bidirectional BCIs
- In-depth discussion of BCI applications and BCI ethics
- Questions and exercises in each chapter
- Supporting website with annotated list of book-related links.

## Book Information

File Size: 21320 KB

Print Length: 335 pages

Simultaneous Device Usage: Up to 4 simultaneous devices, per publisher limits

Publisher: Cambridge University Press; 1 edition (September 30, 2013)

Publication Date: January 30, 2014

Sold by:Â Digital Services LLC

Language: English

ASIN: B00E99YPY0

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #168,746 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #21

inÂ Books > Computers & Technology > Computer Science > AI & Machine Learning > Natural Language Processing #27 inÂ Kindle Store > Kindle eBooks > Nonfiction > Politics & Social Sciences > Social Sciences > Anthropology > Physical #39 inÂ Books > Engineering & Transportation > Engineering > Bioengineering > Biomedical Engineering

## Customer Reviews

I just picked up a copy Rajesh Rao's new book Brain-Computer Interfacing. Rao received his PhD from UR working under Dana Ballard, and has lately been much in the news for his work on -- what else -- brain-computer interfaces. Even if you don't care about brain interfaces, however, the book turns out to include an excellent concise summary of signal processing and machine learning -- in about 50 pages covering practically everything a beginning researcher needs to know. All the various techniques and algorithms are tied together by running examples of interpreting neural data, making for an usually coherent and readable summary. Highly recommended!

Rao's book on BCI is the best introductory material on this field, and the best as a quick reference and starting point. It is absolutely great if you need it to organize workshops or lectures because it contains a lot of "Teaching material" within the book (Questions and exercises at the end of each chapter). Complex issues and "oceans of papers" are very well summarized and clarified in this book.

Great book on Basic BCI. Lost one star because many of the equations in the kindle version was deformed and unreadable.

[Download to continue reading...](#)

Brain-Computer Interfacing Artificial Intelligence to Bus Systems and Computer Interfacing, Volume 2, Encyclopedia of Applied Physics Deep Sleep: Brain Wave Subliminal (Brain Sync Series) (Brain Sync Audios) Python: Python Programming For Beginners - The Comprehensive Guide To Python Programming: Computer Programming, Computer Language, Computer Science Python: Python Programming For Beginners - The Comprehensive Guide To Python Programming: Computer Programming, Computer Language, Computer Science (Machine Language) A Colorful Introduction to the Anatomy of the Human Brain: A Brain and Psychology Coloring Book The Brain That Changes Itself: Personal Triumphs from the Frontiers of Brain Science National Geographic Kids Brain Games: The Mind-Blowing Science of Your Amazing Brain Brain Boosters for Groups In a Jar: 101 brain-enhancing games to get teens moving and connecting Grandpa, Will Marijuana Hurt My

Brain?, 11 Key Ways That Using Marijuana Can Damage The Brain of A Youth Brain Tumor: Causes, Symptoms, Signs, Diagnosis, Treatments, Stages of Brain Tumor - Revised Edition - Illustrated by S. Smith Brain Games for Kids #1 (Brain Games Kids) The Traumatized Brain: A Family Guide to Understanding Mood, Memory, and Behavior after Brain Injury (A Johns Hopkins Press Health Book) A Colorful Introduction to the Anatomy of the Human Brain: A Brain and Psychology Coloring Book (2nd Edition) The Grain Brain Whole Life Plan: Boost Brain Performance, Lose Weight, and Achieve Optimal Health Brain Maker: The Power of Gut Microbes to Heal and Protect Your Brain - for Life Grain Brain: The Surprising Truth About Wheat, Carbs, and Sugar - Your Brain's Silent Killers The Thin Woman's Brain: Re-wiring the Brain for Permanent Weight Loss Brain Maker: The Power of Gut Microbes to Heal and Protect Your Brain&#150;for Life The Computer Insectary: A Field Guide to Viruses, Bugs, Worms, Trojan Horses, and Other Stuff That Will Eat Your Programs and Rot Your Brain

[Dmca](#)