



Selection of Psychophysiological Features Across Subjects for Classifying Workload Using Artificial Neural Networks

By Trevor I. Laine

Biblioscholar Nov 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x10 mm. This item is printed on demand - Print on Demand Neuware - The issue of pilot workload is important to the United States Air Force because pilot overload or task saturation leads to decreases in mission effectiveness. Additionally, in the most extreme cases, pilot overload may lead to the loss of aircraft and crewmember lives. Current research efforts are utilizing psychophysiological data including electroencephalography (EEG), cardiac, eye-blink, and respiration measures in attempt to identify workload levels. The primary focus of this effort is to determine if a single parsimonious set of psychophysiological features exists for accurately classifying workload levels between multiple test subjects. To accomplish this objective, the signal-to-noise (SNR) saliency measure is used to determine the usefulness of psychophysiological features in feedforward artificial neural networks (ANNs). The SNR saliency measure determines the saliency, or relative value, of a feature by comparing it to a feature of injected noise. For this effort, 36 psychophysiological features were derived from the data collected as each subject completed simulated crewmember tasks using the Multi-Attribute Task Battery developed by NASA. These tasks were randomly presented to the subjects in blocks with three distinct levels:...



READ ONLINE

Reviews

An exceptional pdf and the typeface utilized was fascinating to read through. It can be writter in straightforward words and phrases instead of confusing. I am just quickly could possibly get a delight of looking at a written ebook.

-- Prof. Arlie Bogan

It in a single of the best book. This is for those who statte there had not been a well worth reading through. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Dr. Barney Robel Jr.

See Also



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG, Eignungstest für das Medizinstudium, Adult Attachment Interview,...



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers who are new to computer programming. Although...



Crochet: Learn How to Make Money with Crochet and Create 10 Most Popular Crochet Patterns for Sale: (Learn to Read Crochet Patterns, Charts, and Graphs, Beginner's Crochet Guide with Pictures) (Paperback)

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Getting Your FREE Bonus Download this book, read it to the end and see BONUS: Your FREE Gift chapter after...



Pickles To Pittsburgh: Cloudy with a Chance of Meatballs 2

Atheneum Books for Young Readers, 2000. Paperback. Book Condition: New. No Jacket. New paperbook print book copy of Pickles to Pittsburgh: Cloudy with a Chance of Meatballs 2 written by Judi Barrett. Drawn by Ron Barrett. New York: Athenium Books for Young...



Adobe Indesign CS/Cs2 Breakthroughs

Peachpit Press, 2005. Softcover. Book Condition: Neu. Gebraucht - Sehr gut Unbenutzt. Schnelle Lieferung, Kartonverpackung. Abzugsfähige Rechnung. Bei Mehrfachbestellung werden die Versandkosten anteilig erstattet. - Adobe InDesign is taking the publishing world by storm and users are hungry for breakthrough solutions to...



Sport is Fun (Red B) NF

Pearson Education Limited. Paperback. Book Condition: new. BRAND NEW, Sport is Fun (Red B) NF, Dianne Irving, This title is part of Pearson's Bug Club - the first whole-school reading programme that joins books and an online reading world to teach today's...