Low-Profile Jamming Technology for Medical Rehabilitation
Timothy M. Simon, Bruce H. Thomas, and Ross T. Smith

Layer jamming can be used to alter material stiffness in real time under computer control. This article explores the use of smart materials that combine low-profile jamming with clothing items and presents a prototype wearable device.

Wearable Computing for the Internet of Things
Simone Cirani and Marco Picone

The authors analyze the characteristics of wearable applications for Internet of Things scenarios and describe the interaction patterns that should occur between wearable or mobile devices and smart objects.

Human-Cognition-Based CAPTCHAs
Sanjib Kumar Saha, Abhijit Kumar Nag, and Dipankar Dasgupta

CAPTCHAs help to cope with threats to online authentication systems, but interpreting them is hard for regular Internet users. The authors’ alternative CAPTCHA poses mathematical, logical, and inference problems that only humans can understand and answer correctly.
A Semantic Recommender System for Adaptive Learning

Paolo Montuschi, Fabrizio Lamberti, Valentina Gatteschi, and Claudio Demartini

Individuals must continuously update their qualification levels to stay relevant in today’s market. The authors’ semantic-based recommender system crosses heterogeneous information about individuals’ backgrounds and advertised jobs with an online course catalog to identify appropriate learning resources.

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