

Discovery

We SHARE to inspire and ignite ideas for Information Systems Technology & Design (ISTD) Pillar!

The titles featured here are to give you a peek into the wealth of resources we have. We hope, through this will encourage you to explore and read further. Share with us topics of importance to ISTD and we can introduce relevant titles from some 400,000 eBooks we carry.

December 2015

PUBLICATIONS BY ISTD

A Modular Framework For Color Image Watermarking

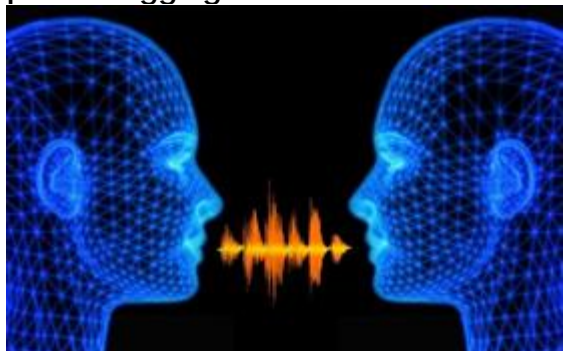


Co-authored by ISTD Research Fellow, Victor Pomponiu

To prevent malware from overriding the security & integrity of media, this paper presents the Multichannel Image Modular Integrity Checker (MIMIC), a non-reversible algorithm for the fragile blind watermarking of color images and its application on the JPEG compressed format.

Source: [Signal Processing](#) (February 2016)

Exploiting Meta Features For Dependency Parsing And Part-Of-Speech Tagging



Co-authored by ISTD Assistant Professor, Zhang Yue

To address the sparseness problem encountered in natural language processing tasks, the authors have proposed a learning framework of feature transformation. Upon applying the framework on dependency parsing, accuracy was achieved for both Chinese & English data.

Source: [Artificial Intelligence](#) (January 2016)

INTERNET OF THINGS

Protecting Privacy in an IoT-Connected World_



In the light of the growth of the IoT, privacy becomes a concern with the real cost may be greater than what we think. This article addresses the concern and how privacy protection could be implemented.

Source: [Information Management Journal](#) (November/December 2015)

Can Internet of Things Be Democratized?



Focusing on the celebration of the Internet's 25th anniversary, this article looks into the impact of the next Internet on privacy, jobs and the environment.

Source: [CCPA Monitor](#) (November/December 2015)

BIOINFORMATICS

What's in a face?



Several scientists and companies have ventured into a new world of appearance prediction by tapping on DNA to identify and nab criminals. Supporters of this technology predict that this could also aid in putting a face to our ancestors or even to an unborn child.

Source: [Science News](#) (December 2015)

Large-scale extraction of gene interactions from full-text literature using DeepDive



Curating gene-gene interactions have become an uphill task due to its exponential growth. Researchers have built an extractor to extract the information of gene-gene interactions using DeepDive. This will aid in building a complete repository of the gene-gene interactions to understand cellular processes, human disease and drug response.

Source: [Bioinformatics](#) (January 2016)

ARTIFICIAL INTELLIGENCE

Artificial Intelligence Gives Photos New Life Online



Until recently, computers could not decipher much from photos, proving it to be a challenge when searching for specific photographs. Now artificial intelligence engines can do incredible things with photos. Check out this article offering information on several photos-based artificial intelligence software which including Google's Tensorflow, Facebook's Photo Magic, Pinterest's Visual Search and more!

Source: [eWeek](#) (November 2015)

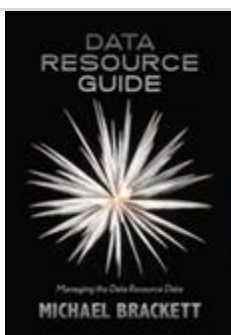
SLIC: Self-Learning Intelligent Classifier for network traffic



Phenomenal growth of the Internet has made internet traffic classification much complex, affecting network security and management. Accuracy of supervised approaches are affected also. Researchers in Singapore address this by developing the Self-Learning Intelligent Classifier (SLIC) which elf-learns and rebuilds the classification model dynamically.

Source: [Computer Networks](#) (November 2015)

NEW BOOKS



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