

DEPARTMENT: INFORMATICS EUROPE AND ACM EUROPE COUNCIL

Regulating Automated Decision Making

A group assembled by Informatics Europe and the policy committee of the ACM Europe Council produced a report entitled "When Computers Decide" that makes 10 recommendations to policy leaders regarding automated decision making ...

James Larus, Chris Hankin

Page 5

DEPARTMENT: CERF'S UP

Traceability

A primary topic of consideration at a recent workshop on cybersecurity was how to preserve the freedom and openness of the Internet while protecting against the harmful behaviors that have emerged in this global medium. That ...

Vinton G. Cerf

Page 7

DEPARTMENT: LETTERS TO THE EDITOR

Encourage ACM to Address U.S. Election Integrity

In the spirit of Moshe Y. Vardi's call for ACM to ". . . be more active in addressing social responsibility issues raised by computing technology," we urge the ACM U.S. Public Policy Council to undertake a study of the technological ...

CACM Staff

Pages 10-11

DEPARTMENT: BLOG@CACM

Assessing Responsibility for Program Output

We lack an easy way to indicate that algorithms do not make decisions and are not biased; programmers do, and are.

Robin K. Hill

Pages 12-13

COLUMN: NEWS

Animals Teach Robots to Find Their Way

Navigation research demonstrates bio-machine symbiosis.

Chris Edwards

Pages 14-16

Electronics Are Leaving the Plane

Stacking chips and connecting them vertically increases both speed and functionality.

Don Monroe

Pages 17-18

Broadening the Path for Women in STEM

Organizations work to address 'a notable absence of women in the field.'

Esther Shein

Pages 19-21

COLUMN: GLOBAL COMPUTING

Designing Sustainable Rural Infrastructure Through the Lens of OpenCellular

Understanding the unique local context, as well as technical considerations, are essential components of successful project deployment.

Kashif Ali, Kurtis Heimerl

Pages 22-25

COLUMN: EDUCATION

Providing Equitable Access to Computing Education

Seeking the best measures to reach advantaged and less-advantaged students equally.

Mark Guzdial, Amy Bruckman

Pages 26-28

COLUMN: KODE VICIOUS

Every Silver Lining Has a Cloud

Cache is king. And if your cache is cut, you are going to feel it.

George V. Neville-Neil

Pages 29-30

COLUMN: POINT/COUNTERPOINT: DEMOCRACY AND E-DEMOCRACY

Point: Foundations of E-Democracy

Considering the possibility of achieving an e-democracy based on long-established foundations that strengthen both real-world democracies and virtual Internet communities.

Ehud Shapiro

Pages 31-34

Counterpoint: E-Democracy Won't Save Democracy. Democracy Will Save Democracy

Increased technology is not the solution to the fundamental issue of declining democratic culture.

Douglas Schuler

Pages 34-36

SECTION: PRACTICE

Algorithms Behind Modern Storage Systems

Different uses for read-optimized B-trees and write-optimized LSM-trees.

Alex Petrov

Pages 38-44

Research for Practice: Prediction-Serving Systems

What happens when we wish to actually deploy a machine learning model to production?

Dan Crankshaw, Joseph Gonzalez, Peter Bailis

Pages 45-49

Consistently Eventual

For many data items, the work never settles on a value.

SECTION: CONTRIBUTED ARTICLES

How to Teach Computer Ethics through Science Fiction

Science fiction in particular offers students a way to cultivate their capacity for moral imagination.

Emanuelle Burton, Judy Goldsmith, Nicholas Mattei

Pages 54-64

Amdahl's Law for Tail Latency

Queueing theoretic models can guide design trade-offs in systems targeting tail latency, not just average performance.

Christina Delimitrou, Christos Kozyrakis

Pages 65-72

SECTION: REVIEW ARTICLES

Multiparty Privacy in Social Media

Online privacy is not just about what you disclose about yourself, it is also about what others disclose about you.

Jose M. Such, Natalia Criado

Pages 74-81

SECTION: RESEARCH HIGHLIGHTS

Technical Perspective: Graphs, Betweenness Centrality, and the GPU

"Accelerating GPU Betweenness Centrality" by McLaughlin and Bader ably addresses the challenges to authors of efficient graph implementations in the important context of a computation called betweenness centrality.

John D. Owens

Page 84

Accelerating GPU Betweenness Centrality

We present a hybrid GPU implementation that provides good performance on graphs of arbitrary structure rather than just scale-free graphs as was done previously.

Adam McLaughlin, David A. Bader

Pages 85-92

COLUMN: LAST BYTE

Deadlock

Upgraded with new instructions, my AI aims to debug its original programmer, along with his home planet.

William Sims Bainbridge

Pages 96-ff

SIGN IN for Full Access

User Name

Password

» [Forgot Password?](#)

» [Create an ACM Web Account](#)

[SIGN IN](#)



[Previous Issue](#) [Next Issue](#)

[View the Digital Library](#)

[View the Digital Edition](#)

[Download a PDF of this issue](#)

ABOUT COMMUNICATIONS

[Editorial Board](#)

[Editorial Staff](#)

[Author Center](#)

[Editorial Calendar](#)

COMMUNICATE!

[Send us Feedback](#)

[Submit a Letter to the Editor](#)

[Contact the Publisher](#)