

DEPARTMENT: CERF'S UP

Celebrating Excellence

ACM's most prestigious recognition is the ACM A.M. Turing Award and the 2017 award goes to John Hennessy and David Patterson: "For pioneering a systematic, quantitative approach to the design and evaluation of computer architectures ...

Vinton G. Cerf

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DEPARTMENT: LETTERS

TO THE EDITOR

When to Hold 'Em

"Always Out of Balance" (April 2018) overstated (somewhat) the effect of intractability by claiming the intractability of computing Nash equilibrium necessitates researchers abandon this notion in favor of other competition-related ...

CACM Staff

Pages 6-7

DEPARTMENT: BLOG@CACM

Programming Programming Languages, and Analyzing Facebook's Failure

Mark Guzdial considers an idea with significant educational implications, while Susan Landau looks into the Cambridge Analytica/Facebook scandal.

Mark Guzdial, Susan Landau

Pages 8-9

COLUMN: NEWS

Rewarded for RISC

ACM A.M. Turing Award recipients David Patterson and John Hennessy developed the "dangerous" idea that software should be simpler so it can be executed more quickly, which evolved into the Reduced Instruction Set Computer architecture ...

Neil Savage

Pages 10-12

Deep Learning Hunts for Signals

Among the Noise

Neural networks can deliver surprising, and sometimes unwanted, results.

Chris Edwards

Pages 13-14

3D Sensors Provide Security,

Better Games

A variety of techniques allow sensors to locate and recognize objects in space.

Keith Kirkpatrick

Pages 15-17

Getting Hooked on Tech

Are technology companies maximizing profits by making users addicted to their products?

Logan Kugler

Pages 18-19

COLUMN: INSIDE RISKS

Risks of Cryptocurrencies

Considering the inherent risks of cryptocurrency ecosystems.

Nicholas Weaver
Pages 20-24

PROFESSION OF IT

An Interview with Dave Parnas

A discussion of ideas about software engineering.

Peter J. Denning
Pages 25-27

Watchdogs vs. Snowflakes

Taking wild guesses.

George V. Neville-Neil
Pages 28-29

Effectiveness of Anonymization in Double-Blind Review

Assessing the effectiveness of anonymization in the review process.

C. Le Goues, Y. Brun, S. Apel, E. Berger, S. Khurshid, Y. Smaragdakis
Pages 30-33

Designing Cluster Schedulers for Internet-Scale Services

Embracing failures for improving availability.

Diptanu Gon Choudhury, Timothy Perrett
Pages 34-40

A look at JavaScript libraries in the wild.

Tobias Lauinger, Abdelberi Chaabane, Christo B. Wilson
Pages 41-47

A.B.A. = Always be automating.

Thomas A. Limoncelli
Pages 48-53

ARTICLES

Bias on the Web

Bias in Web data and use taints the algorithms behind Web-based applications, delivering equally biased results.

Ricardo Baeza-Yates
Pages 54-61

By focusing on users' abilities rather than disabilities, designers can create interactive systems better matched to those abilities.

Jacob O. Wobbrock, Krzysztof Z. Gajos, Shaun K. Kane, Gregg C. Vanderheiden
Pages 62-71

COLUMN: THE

COLUMN: KODE VICIOUS

COLUMN: VIEWPOINT

SECTION: PRACTICE

**Thou Shalt Not
Depend on Me**

**Documentation Is
Automation**

SECTION: CONTRIBUTED

**Ability-Based
Design**

**Identifying
Patterns in**

Medical Records through Latent Semantic Analysis

Text analysis can reveal patterns of association among medical terms and medical codes.

David Gefen, Jake Miller, Johnathon Kyle Armstrong, Frances H. Cornelius, Noreen Robertson, Aaron Smith-McLallen, Jennifer A. Taylor

Pages 72-77

SECTION: REVIEW

ARTICLES

Privacy in Decentralized Cryptocurrencies

When it comes to anonymizing cryptocurrencies, one size most definitely does not fit all.

Daniel Genkin, Dimitrios Papadopoulos, Charalampos Papamanthou

Pages 78-88

SECTION: RESEARCH

HIGHLIGHTS

Technical Perspective: Measuring Optimization Potential with Coz

In "Coz: Finding Code that Counts with Causal Profiling," Curtsinger and Berger describe causal profiling, which tell programmers exactly how much speed-up bang to expect for their optimization buck.

Landon P. Cox

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**Coz: Finding Code
that Counts with**

Causal Profiling

This paper introduces causal profiling. Unlike past profiling approaches, causal profiling indicates exactly where programmers should focus their optimization efforts, and quantifies their potential impact.

Charlie Curtsinger, Emery D. Berger

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COLUMN: LAST BYTE

RISC Management

ACM A.M. Turing award recipients John Hennessy and David Patterson have introduced generations of students to reduced instruction set computing.

Leah Hoffmann

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