



ACM電腦相關領域全文資料庫 教育訓練

長智文化事業有限公司(iGroup Taiwan)

主講人: 藍凱騰

課程大綱

- ACM簡介
- ACM新出版品 – ACM Books
- ACM Digital Library簡介
- ACM Digital Library使用介紹
- ACM Mobile App

ACM 簡介

ACM Digital Library 簡介

ACM 簡介



**Association for
Computing Machinery**

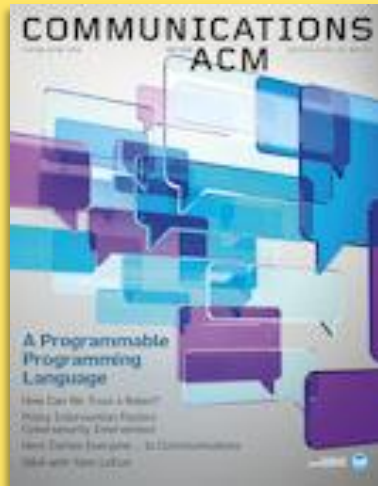
- 成立於1947年
- 為非營利的學會，著重在推廣電腦科學作為一門科學和專業

ACM簡介



- 超過11萬個會員，遍佈世界各地190個國家

ACM簡介



Magazines



Journals



Proceedings

- 主要的活動包括出版學術出版品，如期刊、雜誌、新聞簡訊(newsletter)、會議論文集，與電子資料庫(Digital Library)

ACM簡介



Conferences



Workshops



Symposia

- 在電腦科學領域重要研討會的主辦者
- 每年舉辦超過275場活動(會議、研討會、專題討論會)，產生500冊記錄

ACM新出版品



- 與Morgan & Claypool合作出版
- 該系列最初將專注於四類型圖書：
 - (1). 研究生層級之教科書
 - (2). 研究專書 -- 提供成熟和新興領域的概述
 - (3). 從業人員層級的專業書籍
 - (4). 專論計算機史與計算機對社會影響之書籍

ACM Digital Library 簡介

- **ACM Digital Library**是一個三合一的資料庫：
 - 由ACM本身及其附屬機構所出版的全文文章
 - 提供電腦文獻指引(the Guide to Computing Literature)，涵蓋整個電腦領域的文摘與和索引服務
 - 提供分析工具來幫助分析電腦科學領域出版品、作者及機構
- **在ACM Digital出版的內容適合於：**
 - 從業者
 - 研究人員
 - 教育者
 - 學生

ACM Digital Library 簡介

- 490,000+ 全文文章
- 2,750,000+ 書目資料
- 6,000+ 多媒體文件
- 每年出版20,000+ 全文文章
- 每年增加500多場會議論文資料

ACM Digital Library – 主題領域

- Artificial Intelligence
- Cloud Computing
- Graphics/Imaging
- Gaming
- eLearning
- Interaction Design
- Communication
- Data mining
- Mobile Computing
- Databases
- Design Automation

ACM Digital Library – 主題領域

- Embedded Systems
- Networking
- Hardware
- Human Computer Interaction
- Wireless/Mobility
- Computer Architecture
- Data Structures
- Distributed Computing
- Security
- Software
- Network Architecture
- ...其他更多領域

ACM Digital Library 使用介紹

The **ACM Digital Library** is a research, discovery and networking platform containing:

- The **Full-Text Collection** of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books.
- A collection of curated and **hosted full-text** publications from select publishers.
- The **ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Please find our redesigned DL resource center at
<http://libraries.acm.org>

Advanced Search

Browse the ACM Publications:

- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

Browse the Special Interest Groups:

- [Special Interest Groups \(SIGs\)](#)

Browse the Conferences:

- [Recent and Upcoming Conferences](#)
- [Conference Listing](#)

Browse the Special Collections:

- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)
"...is the definitive reference in computer science and technology..."



ACM BOOKS a dynamic new series of advanced level books in computer science, published by ACM in collaboration with Morgan & Claypool Publishers.

[learn more about the program](#) | [check out the books](#)



[Institutional Profile Pages Beta](#)

ACM releases new feature giving snapshot of an Institution's contribution to the field.

Computing Reviews

Access [critical reviews](#) of computing literature.

[Become a reviewer](#) for Computing Reviews

The ACM DL app for Android, iOS and Windows is now available (and free).

As an ACM DL user:

1. [Sign-in or Sign-up](#) to the ACM DL with your ACM Web Account now.
2. Install the ACM DL app onto your device.
3. [Verify](#) (send ACM DL app with your ACM Web Account).



DONE—You now have access to the ACM DL on your mobile device.



Recently loaded issues and proceedings:

(available in the DL within the past 2 weeks)

ACM Transactions on Accessible Computing (TACCESS)

[Volume 11 Issue 1](#)

ACM Transactions on Algorithms (TALG)

[Volume 14 Issue 2](#)

ACM Transactions on Database Systems (TODS)

[Volume 43 Issue 1](#)

Queue

[Volume 16 Issue 1](#)

Ubiquity

Vol. 14, No. 1, March 2014

ACM Journals/Transactions

Search within the ACM Journals:



CSUR [ACM Computing Surveys \(CSUR\)](#)

These comprehensive, readable tutorials and survey papers give guided tours through the literature and explain topics to those who seek to learn the basics of areas outside their specialties. The carefully planned and presented introductions in [Computing Surveys \(CSUR\)](#) are also an excellent way for professionals to develop perspectives on, and identify trends in complex technologies. Recent issues have covered image understanding, software reusability, and object and relational database topics.

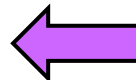


IMWUT [Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies](#)

[The Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies \(IMWUT\)](#) is a premier journal series for research relevant to the post-PC era. Computing technology is becoming increasingly pervasive; embedded throughout the environment as well as in mobile devices, wearables, and the Internet of Things. This is leading to a transformative change in the utility that technology can provide to users and societies, and how people relate to technology. IMWUT covers a broad range of topics relevant to this change, such as mobile systems, wearable technologies and intelligent environments. The scope includes research contributions in systems and infrastructures, new hardware and sensing techniques, and studies of user experiences and societal impact. IMWUT also welcomes contributions on new methodologies and tools, theories and models, as well as visionary and survey papers that help advance the field.



JACM [Journal of the ACM \(JACM\)](#)



The [Journal of the ACM \(JACM\)](#) provides coverage of the most significant work on principles of computer science, broadly construed. The scope of research covered encompasses contributions of lasting value to any area of computer science. To be accepted, a paper must be judged to be truly outstanding in its field. JACM is interested in work in core computer science and in work at the boundaries, both the boundaries of subdisciplines of computer science and the boundaries between computer science and other fields.



JDIQ [Journal of Data and Information Quality \(JDIQ\)](#)

[JDIQ's](#) mission is to publish high quality articles that make a significant and novel contribution to the field of data and information quality. JDIQ welcomes research contributions on the following areas, but not limited to: Information Quality in the Enterprise Context; Database related technical solutions for Information Quality; Information Quality in the context of Computer Science and Information Technology; Information Curation.

JDIQ accepts research conducted using a wide variety of methods ranging from positivists to interpretive methods, systems building descriptions, and database theory, as well as statistical analysis, mathematical modeling, quasi experimental methods, hermeneutics, action research, and case study. JDIQ accepts diverse research methods that are customary in different research backgrounds and traditions, both quantitative and qualitative. Research papers need to demonstrate the use of a rigorous method or methods. Research papers also need to provide valuable and relevant implications for applying their findings and solutions in practice.

[ACM Journals/Transactions](#)**JACM** [Journal of the ACM \(JACM\)](#)

The *Journal of the ACM (JACM)* provides coverage of the most significant work on principles of computer science, broadly construed. The scope of research covered encompasses contributions of lasting value to any area of computer science. To be accepted, a paper must be judged to be truly outstanding in its field. JACM is interested in work in core computer science and in work at the boundaries, both the boundaries of subdisciplines of computer science and the boundaries between computer science and other fields.

Search within JACM: [About](#)[Award Winners](#)[Authors](#)[Affiliations](#)[Publication Archive](#)**JACM subject areas**[Complexity classes](#) [Computational complexity and](#)[cryptography](#) [Computations on matrices](#) **Design****and analysis of****algorithms Discrete****mathematics Formal****languages and automata****theory** [Grammars and context-free languages](#)**Logic** [Models of computation](#) [Ordinary differential](#)[equations](#) [Queueing theory](#) **Randomness,****geometry and discrete****structures** [Scheduling algorithms](#) [Sequential decision](#)[making](#) [Sorting and searching](#) **Bibliometrics: publication history**

Publication years	1954-2018
Publication count	2,880
Citation Count	91,300
Available for download	2,880
Downloads (6 Weeks)	11,095
Downloads (12 Months)	97,773
Downloads (cumulative)	2,259,251
Average downloads per article	784.46
Average citations per article	31.70

Top 10 Downloaded Articles (past 6 weeks) / Top 10 Most Cited Articles[The Applied Pi Calculus: Mobile Values, New Names, and Secure Communication](#) - 2017[Martin Abadi](#), [Bruno Blanchet](#), [Cédric Fournet](#)

Downloaded 174 times

[Robust principal component analysis?](#) - 2011[Emmanuel J. Candès](#), [Xiaodong Li](#), [Yi Ma](#), [John Wright](#)

ACM Journals/Transactions



JACM [Journal of the ACM \(JACM\)](#)

The [Journal of the ACM \(JACM\)](#) provides coverage of the most significant work on principles of computer science, broadly construed. The scope of research covered encompasses contributions of lasting value to any area of computer science. To be accepted, a paper must be judged to be truly outstanding in its field. JACM is interested in work in core computer science and in work at the boundaries, both the boundaries of subdisciplines of computer science and the boundaries between computer science and other fields.

Search within JACM:

SEARCH

About

Award Winners

Authors

Affiliations

Publication Archive



A. M. Turing Award

點選姓名連結至Author Profile



[John Warner Backus](#)
A. M. Turing Award 1977



[Manuel Blum](#)
A. M. Turing Award 1995



[Frederick P. Brooks, Jr.](#)
A. M. Turing Award 1999



[Edmund Nelson Clarke, Jr.](#)
A. M. Turing Award 2007



[John Cocke](#)
A. M. Turing Award 1987



[Stephen A. Cook](#)
A. M. Turing Award 1982



[Fernando José Corbató](#)
A. M. Turing Award 1990



[E. Allen Emerson](#)
A. M. Turing Award 2007





John Warner Backus

[Wikipedia Entry](#)



Affiliation history

- [IBM, USA](#)
- [Fujitsu Services Limited](#)
- [Delft University of Technology](#)
- [IBM Almaden Research Center](#)

Bibliometrics: publication history

Average citations per article	48.04
Citation Count	1,105
Publication count	23
Publication years	1954-2007
Available for download	12
Average downloads per article	2,195.75
Downloads (cumulative)	26,349
Downloads (12 Months)	2,555
Downloads (6 Weeks)	323

SEARCH

[Search Author's Publications](#)

ROLE

► Author only

AUTHOR'S COLLEAGUES

[See all colleagues of this author](#)

SUBJECT AREAS

[See all subject areas](#)

KEYWORDS

[See all author supplied keywords](#)



[CONTACT US](#)

AUTHOR PROFILE PAGES

[Project background](#)



Author: Ivan Garcia

23 results found

Export Results: [bibtex](#) | [endnote](#) | [acmref](#) | [csv](#)

Result 1 – 20 of 23

Result page: [1](#) [2](#)

Sort by: [publication date](#) ▼

- 1 [Can programming be liberated from the von Neumann style?: a functional style and its algebra of programs](#)



[John Backus](#)

[January 2007](#) ACM Turing award lectures

Publisher: ACM

Bibliometrics:

Citation Count: 6

Downloads (6 Weeks): 67, Downloads (12 Months): 513, Downloads (Overall): 2,434

Full text available: [PDF](#)

Conventional programming languages are growing ever more enormous, but not stronger. Inherent defects at the most basic level cause them to be both fat and weak: their primitive word-at-a-time style of programming inherited from their common ancestor--the von Neumann computer, their close coupling of semantics to state transitions, their division ...

Keywords: applicative computing systems, program termination, von Neumann languages, APL, metacomposition, von Neumann computers, applicative state transition systems, functional forms, program correctness, program transformation, programming languages, Algol, algebra of programs, combining forms, functional programming, models of computing systems

ACM Journals/Transactions



JACM [Journal of the ACM \(JACM\)](#)

The *Journal of the ACM (JACM)* provides coverage of the most significant work on principles of computer science, broadly construed. The scope of research covered encompasses contributions of lasting value to any area of computer science. To be accepted, a paper must be judged to be truly outstanding in its field. JACM is interested in work in core computer science and in work at the boundaries, both the boundaries of subdisciplines of computer science and the boundaries between computer science and other fields.

Search within JACM: [SEARCH](#)

[About](#)
[Award Winners](#)
[Authors](#)
[Affiliations](#)
[Publication Archive](#)

Filter by name:

First Name	Last Name	Paper Counts
Seymour	Ginsburg	23
Christos,	Papadimitriou	22
Robert	Tarjan	21
Joseph	Halpern	20
Victor	Vianu	19
Mihalis	Yannakakis	17
Ronald	Fagin	16
Zvi	Galil*	16
Nancy	Lynch	16
Jeffrey	Ullman	16
Edward	Coffman	15
Georg	Gottlob	15
Arnold	Rosenberg	15
Hagit	Attiya	14

點選姓名連結
至Author Profile

ACM Journals/Transactions



JACM [Journal of the ACM \(JACM\)](#)

The [Journal of the ACM \(JACM\)](#) provides coverage of the most significant work on principles of computer science, broadly construed. The scope of research covered encompasses contributions of lasting value to any area of computer science. To be accepted, a paper must be judged to be truly outstanding in its field. JACM is interested in work in core computer science and in work at the boundaries, both the boundaries of subdisciplines of computer science and the boundaries between computer science and other fields.

Search within JACM:

[About](#)
[Award Winners](#)
[Authors](#)
[Affiliations](#)
[Publication Archive](#)

Filter by Affiliation:

Affiliation	Paper Counts
Massachusetts Institute of Technology	171
Nokia Bell Labs	151
IBM Thomas J. Watson Research Center	149
Stanford University	127
University of California, Berkeley	121
Carnegie Mellon University	105
Technion - Israel Institute of Technology	100
Princeton University	99
Tel Aviv University	87
Cornell University	80
IBM Almaden Research Center	78
University of California, Los Angeles	65
University of Waterloo	56
Harvard University	55
University of Toronto	55

點選單位名稱連結
Institutional Profile

Institutional Profile: [Massachusetts Institute of Technology](#)

[What is an Institutional Profile?](#) BETA

About

Award Winners

Authors

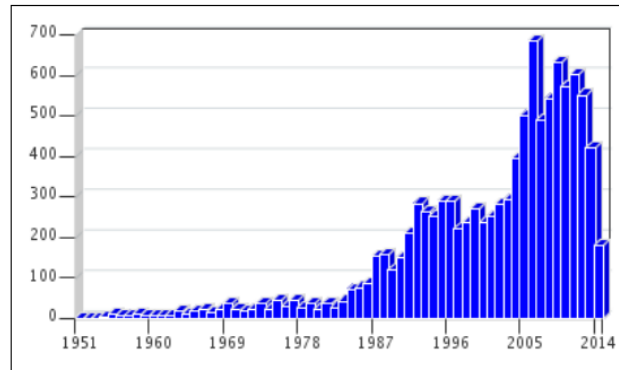
Collaborative Institutions

Publication Archive

ACM SIGs

Papers

Published items by year



Bibliometrics: publication history

Switch to [overall percentile](#)

Average citations per article	25.45
Citation Count	309,594
Publication count	12,163
Publication years	1951-2018
Available for download	4,710
Average downloads per article	1,426.41
Downloads (cumulative)	6,718,380
Downloads (12 Months)	628,211
Downloads (6 Weeks)	81,197

Subject Areas

[Computational geometry](#) [Design and analysis of algorithms](#) [Discrete mathematics](#)
[Human computer interaction](#) [Human-centered computing](#) [Machine learning](#) [Mathematical optimization](#) [Mobile networks](#) [Network flows](#) [Network protocols](#) [Physical sciences and engineering](#) [Randomness, geometry and discrete structures](#)
[Robotic planning](#) [Theory of computation](#) [Wireless access networks](#)

Most Downloaded Articles (past 6 weeks) / Most Cited Articles

[The Power of Abstraction](#) - 2011

[Barbara Liskov](#)

Downloaded 1,021 times

[Scratch: programming for all](#) - 2009

[Mitchel Resnick](#), [John Maloney](#), [Andrés Monroy-Hernández](#), [Natalie Rusk](#), [Evelyn Eastmond](#), [Karen Brennan](#), [Amon Millner](#), [Eric Rosenbaum](#), [Jay Silver](#), [Brian Silverman](#), [Yasmin Kafai](#)

Downloaded 1,003 times

[Reimagining the avatar dream: modeling social identity in digital media](#) - 2017

[D. Fox Harrell](#), [Chong-U Lim](#)

Downloaded 988 times

ACM Journals/Transactions



JACM [Journal of the ACM \(JACM\)](#)

The [Journal of the ACM \(JACM\)](#) provides coverage of the most significant work on principles of computer science, broadly construed. The scope of research covered encompasses contributions of lasting value to any area of computer science. To be accepted, a paper must be judged to be truly outstanding in its field. JACM is interested in work in core computer science and in work at the boundaries, both the boundaries of subdisciplines of computer science and the boundaries between computer science and other fields.

Search within JACM: [SEARCH](#)

[About](#)
[Award Winners](#)
[Authors](#)
[Affiliations](#)
[Publication Archive](#)

Journal of the ACM (JACM)

Archive

2018

[Volume 65 Issue 3, March 2018](#) [Issue-in-Progress](#)

[Volume 65 Issue 2, March 2018](#)

[Volume 65 Issue 1, January 2018](#)

2017

[Volume 64 Issue 6, November 2017](#)

[Volume 64 Issue 5, October 2017](#)

[Volume 64 Issue 4, September 2017](#)

[Volume 64 Issue 3, June 2017](#)

[Volume 64 Issue 2, June 2017](#)

[Volume 64 Issue 1, March 2017](#)

[Volume 63 Issue 6, February 2017](#)

2016

[Volume 63 Issue 5, December 2016](#)

[Volume 63 Issue 4, November 2016](#)

[Volume 63 Issue 3, September 2016](#)

Journal of the ACM (JACM)

Volume 65 Issue 2, March 2018 [table of contents](#)

Editor: [Éva Tardos](#) Cornell University

Published in:



• Journal

[JACM](#) Journal of the ACM (JACM) [archive](#)

[ACM](#) New York, NY, USA

[table of contents](#) ISSN:0004-5411 EISSN:1557-735X



2018 Journal



[Bibliometrics](#)

- Citation Count: 0
- Downloads (cumulative): 416
- Downloads (12 Months): 416
- Downloads (6 Weeks): 354

Tools and Resources

[Buy this Journal](#)

[Recommend the ACM DL to your organization](#)

TOC Service:
[Email](#) [RSS](#) [RSS](#)

[Save to Binder](#)

Export Formats:
[BibTeX](#) [EndNote](#) [ACM Ref](#)

Share:
[f](#) [G+](#) [t](#) [RG](#) [d](#) [+](#)

[Contact Us](#) | Switch to [single page view](#) (no tabs)

[Abstract](#) [Source Materials](#) [Authors](#) [References](#) [Cited By](#) [Index Terms](#) [Publication](#) [Reviews](#) [Comments](#) [Table of Contents](#)

Journal of the ACM (JACM)

Volume 65 Issue 2, March 2018

Table of Contents

[← previous issue](#) | [next issue →](#)

SECTION: Social Choice

[Proving the Incompatibility of Efficiency and Strategyproofness via SMT Solving](#)
[Florian Brandl](#), [Felix Brandt](#), [Manuel Eberl](#), [Christian Geist](#)

Article No.: 6

[doi>10.1145/3125642](#)

Full text: [PDF](#)

Two important requirements when aggregating the preferences of multiple agents are that the outcome should be economically efficient and the aggregation mechanism should not be manipulable. In this article, we provide a computer-aided proof of a sweeping ... [expand](#)

SECTION: Randomized Algorithms & Probabilistic Analysis

Proving the Incompatibility of Efficiency and Strategyproofness via SMT Solving

Full Text:  [PDF](#)  [Get this Article](#)

Authors: [Florian Brandl](#) [Technische Universität München](#)
[Felix Brandt](#) [Technische Universität München](#)
[Manuel Eberl](#) [Technische Universität München](#)
[Christian Geist](#) [Technische Universität München](#)

2018 Article
Research
Refereed

Bibliometrics

- Citation Count: 0
- Downloads (cumulative): 95
- Downloads (12 Months): 95
- Downloads (6 Weeks): 77

Published in:



· Journal
Journal of the ACM (JACM) [JACM Homepage](#) [archive](#)
Volume 65 Issue 2, March 2018
Article No. 6
[ACM](#) New York, NY, USA
[table of contents](#) [doi>10.1145/3125642](#)

Tools and Resources

-  [Buy this Article](#)
-  [Recommend the ACM DL to your organization](#)
-  [Request Permissions](#)
-  TOC Service:
 [Email](#)  [RSS](#)
-  [Save to Binder](#)
-  Export Formats:
[BibTeX](#) [EndNote](#) [ACM Ref](#)
- Share:
      

Author Tags ▼

 [Contact Us](#) | Switch to [single page view](#) (no tabs)[Abstract](#) [Authors](#) [References](#) [Cited By](#) [Index Terms](#) [Publication](#) [Reviews](#) [Comments](#) [Table of Contents](#)

Two important requirements when aggregating the preferences of multiple agents are that the outcome should be economically efficient and the aggregation mechanism should not be manipulable. In this article, we provide a computer-aided proof of a sweeping impossibility using these two conditions for randomized aggregation mechanisms. More precisely, we show that every efficient aggregation mechanism can be manipulated for all expected utility representations of the agents' preferences. This settles an open problem and strengthens several existing theorems, including statements that were shown within the special domain of assignment. Our proof is obtained by formulating the claim as a satisfiability problem over predicates from real-valued arithmetic, which is then checked using a satisfiability modulo theories (SMT) solver. To verify the correctness of the result, a minimal unsatisfiable set of constraints returned by the SMT solver was translated back into a proof in higher-order logic, which was automatically verified by an interactive theorem prover. To the best of our knowledge, this is the first application of SMT solvers in computational social choice.

The **ACM Digital Library** is a research, discovery and networking platform containing:

- The **Full-Text Collection** of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books.
- A collection of curated and **hosted full-text** publications from select publishers.
- The **ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Please find our redesigned DL resource center at
<http://libraries.acm.org>

Advanced Search

Browse the ACM Publications:

- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

Browse the Special Interest Groups:

- [Special Interest Groups \(SIGs\)](#)

Browse the Conferences:

- [Recent and Upcoming Conferences](#)
- [Conference Listing](#)

Browse the Special Collections:

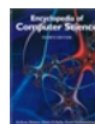
- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)

"...is the definitive reference in computer science and technology..."

Proceedings of the 26th International Conference on World Wide Web

General Chairs: [Rick Barrett](#) W3Events
[Rick Cummings](#) Murdoch University
Program Chairs: [Eugene Agichtein](#) Emory University
[Evgeniy Gabrilovich](#) Google Research



2017 Proceeding



Bibliometrics

- Citation Count: 160
- Downloads (cumulative): 24,013
- Downloads (12 Months): 24,013
- Downloads (6 Weeks): 2,166

Publication of:

- Conference

[WWW '17](#) 26th International World Wide Web Conference

Perth, Australia — April 03 - 07, 2017

[International World Wide Web Conferences Steering Committee](#) Republic and Canton of Geneva, Switzerland ©2017

Tools and Resources



TOC Service:

[Email](#) [RSS](#)[Save to Binder](#)

Export Formats:

[BibTeX](#) [EndNote](#) [ACM Ref](#)

Upcoming Conference:

[WWW '18](#)

Share:

[Contact Us](#)| Switch to [single page view](#) (no tabs)

Abstract

Source Materials

Authors

References

Cited By

Index Terms

Publication

Reviews

Comments

Table of Contents

We welcome you to the WWW2017 conference, the 26th of the series, and only the second one to be held in Australia.

The annual World Wide Web Conference is the premier international forum to present and discuss progress in research, development, standards, and applications related to the Web. This conference is organised under the aegis of the International World Wide Web Conference Committee (IW3C2) in collaboration with local conference organisers in the host city, in this case, the four public universities in Western Australia: Curtin University, Murdoch University, the University of Western Australia and Edith Cowan University. This year, WWW 2017 is offered as the centerpiece of the inaugural Festival of the Web in Perth, a week-long celebration.

WWW 2017 provides an opportunity to hear from the leaders of the web including three distinguished keynote speeches by world-class experts: Mark Pesce, Yoelle Maarek, and Melanie Johnston-Hollitt. There is a rich environment of technical activities, including 164 high quality papers in the Research Tracks, 54 papers in the four alternate tracks, over 100 papers in 15 workshops, 13 tutorial sessions, a Ph.D. Symposium track comprising presentations by seven doctoral students, an Industry track consisting of 20 papers focused on applied research, 20 demonstrations, a W3C track examining the latest Web standards and emerging technologies and 64 posters with, for the first time, a number of these offered as e-posters to augment the static poster panels. Overall, WWW2017 provides more than 400 high quality presentations on the key research and development issues

The **ACM Digital Library** is a research, discovery and networking platform containing:

- The **Full-Text Collection** of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books.
- A collection of curated and **hosted full-text** publications from select publishers.
- The **ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Please find our redesigned DL resource center at <http://libraries.acm.org>

Advanced Search

Browse the ACM Publications:

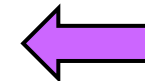
- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

Browse the Special Interest Groups:

- [Special Interest Groups \(SIGs\)](#)

Browse the Conferences:

- [Recent and Upcoming Conferences](#)
- [Conference Listing](#)



Browse the Special Collections:

- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

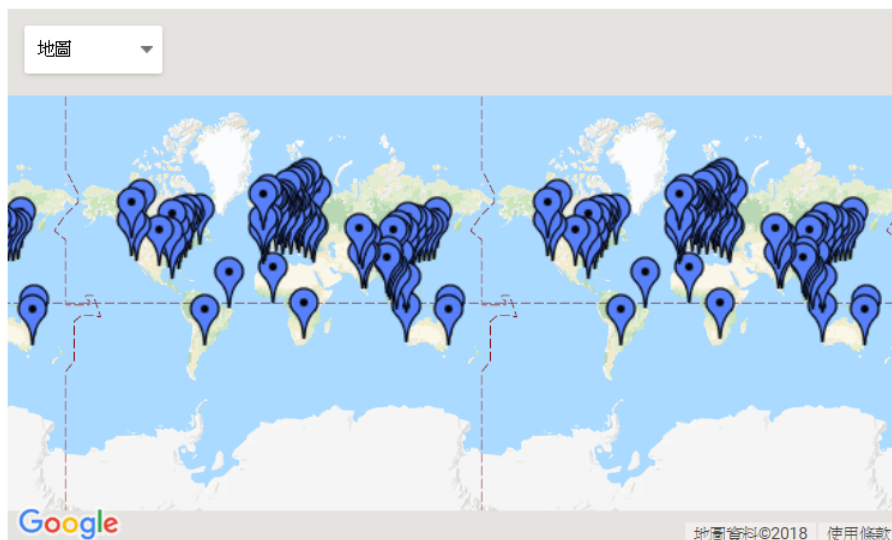
Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)
"...is the definitive reference in computer science and technology..."

ACM Conferences - past 12 months [RSS](#)

[expand map](#)


Upcoming Conferences [RSS](#)

ICIN '18 [21st Innovations in Clouds, Internet and Networks](#)
February 20 - 22, 2018
Paris, France

SIGCSE '18 [The 49th ACM Technical Symposium on Computer Science Education](#)
February 21 - 24, 2018
Baltimore, MD, USA

CGO '18 16th Annual IEEE/ACM International Symposium on Code Generation and Optimization
February 24 - 28, 2018
Vienna, Austria

PPoPP '18 [23rd ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming](#)
February 24 - 28, 2018
Vienna, Austria

FPGA '18 [The 2018 ACM/SIGDA International Symposium on Field Programmable Gate Arrays](#)

ACM Conference Proceedings - past 12 months: Filter by

[\[conference listing\]](#) | [\[proceeding listing\]](#)

Acronym	Proceeding Title	SIG Sponsors	Year
#SMSociety17	Proceedings of the 8th International Conference on Social Media & Society		2017
A-TEST 2017	Proceedings of the 8th ACM SIGSOFT International Workshop on Automated Software Testing	SIGSOFT	2017
AAMAS '17	Proceedings of the 16th Conference on Autonomous Agents and MultiAgent Systems		2017
ABAC '17	Proceedings of the 2nd ACM Workshop on Attribute-Based Access Control	SIGSAC	2017
ACE '18	Proceedings of the 20th Australasian Computing Education Conference		2018
ACI2017	Proceedings of the Fourth International Conference on Animal-Computer Interaction		2017
ACM SE '17	Proceedings of the SouthEast Conference		2017
ACM TUR-C '17	Proceedings of the ACM Turing 50th Celebration Conference - China		2017
ACM-BCB '17	Proceedings of the 8th ACM International Conference on Bioinformatics, Computational Biology, and Health Informatics	SIGBIO	2017
ACSAC 2017	Proceedings of the 33rd Annual Computer Security Applications Conference		2017

The **ACM Digital Library** is a research, discovery and networking platform containing:

- The **Full-Text Collection** of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books.
- A collection of curated and **hosted full-text** publications from select publishers.
- **The ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Please find our redesigned DL resource center at <http://libraries.acm.org>



ACM BOOKS a dynamic new series of

Advanced Search

Browse the ACM Publications:

- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

Browse the Special Interest Groups:

- [Special Interest Groups \(SIGs\)](#)

Browse the Conferences:

- [Recent and Upcoming Conferences](#)
- [Conference Listing](#)

Browse the Special Collections:

- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)
"...is the definitive reference in computer science and technology..."



[Institutional Profile Pages Beta](#)

ACM releases new feature giving snapshot of an Institution's contribution to the field

iphone

SEARCH

Searched for iphone [new search] [edit/save query]

[\[advanced search\]](#)

Searched The ACM Full-Text Collection: 492,393 records [Expand your search to The ACM Guide to Computing Literature: 2,756,298 records] ?

408 results found

Export Results: bibtex | endnote | acmref | csv

23 videos found

Refine by People

[Names](#) ▶
[Institutions](#) ▶
[Authors](#) ▶
[Reviewers](#) ▶

Refine by Publications

[Publication Names](#) ▶
[ACM Publications](#) ▶
[All Publications](#) ▶
[Content Formats](#) ▶
[Publishers](#) ▶

Refine by Conferences

[Sponsors](#) ▶
[Events](#) ▶
[Proceeding Series](#) ▶

Refine by Publication Year



Result 1 – 20 of 408

Result page: 1 2 3 4 5 6 7 8 9 10 >>

Sort by: relevance ▼

1 [Constant connectivity, selective participation: mobile-social interaction of students and faculty](#) [Dana Rotman](#)

April 2010 CHI EA '10: CHI '10 Extended Abstracts on Human Factors in Computing Systems

Publisher: ACM**Bibliometrics:** Citation Count: 3
Downloads (6 Weeks): 4, Downloads (12 Months): 35, Downloads (Overall): 356

Full text available: PDF

Refine by 人物、機構、出版品、
研討會、出版年2 [A native iPhone packbot OCU](#) [Rodrigo Gutierrez](#), [Jeff Craighead](#)

March 2009 HRI '09: Proceedings of the 4th ACM/IEEE international conference on Human robot interaction

Publisher: ACM**Bibliometrics:** Citation Count: 5
Downloads (6 Weeks): 1, Downloads (12 Months): 21, Downloads (Overall): 579

Full text available: PDF

This video abstract discusses the details of the implementation of a Packbot operator control unit (OCU) using Apple's official iPhone SDK.

Keywords: iPhone, robot, touch screen[\[result highlights\]](#)

Searched for iphone [\[new search\]](#) [\[edit/save query\]](#)

[\[advanced search\]](#)

Searched The ACM Full-Text Collection: 492,393 records [\[Expand your search\]](#)

Refinements [\[remove all\]](#) click each refinement below to remove

Institutions: Google Inc.

Names: Priyantha, Bodhi

點一下不要的項目
就可移除

2 results found

[Export Results: bibtex](#) | [endnote](#) | [acmref](#) | [csv](#)

Refine by People

[Names](#) ▶

[Institutions](#) ▶

[Authors](#) ▶

Refine by Publications

[Publication Names](#) ▶

[ACM Publications](#) ▶

[All Publications](#) ▶

[Content Formats](#) ▶

[Publishers](#) ▶

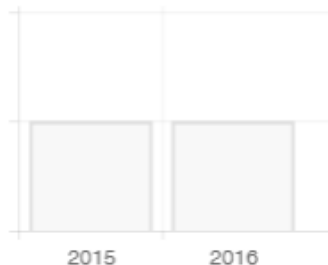
Refine by Conferences

[Sponsors](#) ▶

[Events](#) ▶

[Proceeding Series](#) ▶

Refine by Publication Year



Result 1 – 2 of 2

Sort by: [relevance](#) ▼

- 1** [MELT '15: Proceedings of the 5th International Workshop on Mobile Entity Localization and Tracking in GPS-less Environments](#)
November 2015

After a decade of research and development for GPS-less localization and tracking, there has been significant progress in location-awareness and location-based services around the world. Almost all cell phone platforms, Android, iPhone and Windows phones, have localization and tracking facilities. In addition, special hardware and infrastructure (e.g., RFID, UWB and ...
[\[result highlights\]](#)
- 2** [MELT 2015 workshop report: the fifth ACM SIGSPATIAL International Workshop on Mobile Entity Localization and Tracking in GPS-less Environments \(Seattle, Washington, USA - November 3, 2015\)](#)
[Ying Zhang](#), [Bodhi Priyantha](#)
January 2016 SIGSPATIAL Special: Volume 7 Issue 3, November 2015
Publisher: ACM
Bibliometrics: Citation Count: 0
Downloads (6 Weeks): 2, Downloads (12 Months): 6, Downloads (Overall): 35

Full text available:  [PDF](#)

After a decade of research and development for GPS-less localization and tracking, there has been significant progress in location-awareness and location-based services around the world. Almost all cell phone platforms, Android, iPhone and Windows phones, have localization and tracking facilities. In addition, special hardware and

The **ACM Digital Library** is a research, discovery and networking platform containing:

- The **Full-Text Collection** of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books.
- A collection of curated and **hosted full-text** publications from select publishers.
- The **ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

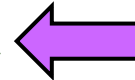
Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Please find our redesigned DL resource center at
<http://libraries.acm.org>

Advanced Search



Browse the ACM Publications:

- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

Browse the Special Interest Groups:

- [Special Interest Groups \(SIGs\)](#)

Browse the Conferences:

- [Recent and Upcoming Conferences](#)
- [Conference Listing](#)

Browse the Special Collections:

- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)
"...is the definitive reference in computer science and technology..."

Advanced Search

Select items from The ACM Full-Text Collection ?

Where Any field matches all of the following words or phrases:

[SEARCH](#) [\[clear\]](#)

[\[sign in\]](#) required to save query [\[show query syntax\]](#)

Saved Queries

To save or access your saved queries please [sign in](#) or [create](#) a free Web account

The ACM Full-Text Collection
The ACM Full-Text Collection
The ACM Guide to Computing Literature

輸入欲檢索的
關鍵字/詞彙

刪除/新增
檢索列

選擇檢索關鍵字於ACM
DL中的全文文章，或是
檢索書目資料(the ACM
Guide)

Advanced Search

Select items from ?Where matches all of the following words or phrases: - +

- Any field ▼
- Common Fields**
- Any field
- Title
- Author
- Abstract
- Publication Year
- Full-text
- Additional Fields**
- Artifact Badge
- Author Affiliation
- Author Keyword
- Conference Location
- Conference Sponsor
- Funding Agency
- Name (all roles)
- Publisher
- Codes**
- ISBN/ISSN
- DOI
- Classification** ▼

- matches all ▼
- matches all
- matches any
- matches none

選擇檢索字/詞彙的
匹配方式

選擇欲檢索的欄位

The **ACM Digital Library** is a research, discovery and networking platform containing:

- The **Full-Text Collection** of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books.
- A collection of curated and **hosted full-text** publications from select publishers.
- The **ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Please find our redesigned DL resource center at
<http://libraries.acm.org>

Advanced Search

Browse the ACM Publications:

- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

Browse the Special Interest Groups:

- [Special Interest Groups \(SIGs\)](#)

Browse the Conferences:

- [Recent and Upcoming Conferences](#)
- [Conference Listing](#)

Browse the Special Collections:

- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)
"...is the definitive reference in computer science and technology..."

Sign In

Sign in with your Web Account

Web account

Password

☒ Keep me signed in ?[Forgot your username or password?](#)

Corporate Sign In

E-mail

Password

SSO for selected corporations

Sign in via your Institution

Find your Institution

☒ Keep me signed in ?

Create a Web account

Email Address

尚未有個人帳號者，於此輸入 e-mail，開始註冊程序

If you are an ACM or SIG Member or subscriber, the email address you provide must match the one we have on file for you; this will enable you to take full advantage of member benefits.

已有個人帳號者，於此登入

Sign In

Sign in with your Web Account
Web account

Password

☒ Keep me signed in ?
[Forgot your username or password?](#)

Corporate Single Sign On
Email

☒ Keep me signed in ?

設定欲使用的
密碼及設定安
全問題

Create a Web account
 is not in our records. Create a new ACM Web account now.

Name
First Name

Last Name

Account Information
ACM Web Account Username
Automatically Generated
Password

Confirm Password

Security Question and Answer
Question

Answer

輸入姓名資料建立
ACM個人帳戶

帳號是系統自動產生，
使用者會收到一封認證
信，您也可以之後再到
myacm.org 網站上更改
帳號(username)

Sign In

Sign in with your Web Account

Web account

Password

☒ Keep me signed in ?[Forgot your username or password?](#)

Corporate Single Sign On

Email

☒ Keep me signed in ?

SSO for selected corporations

Sign in via your Institution

Find your Institution

☒ Keep me signed in ?

Create a Web account

Email

cont

輸入剛註冊的個人帳號密碼
登入

a free web account.

criber, the email address
on file for you; this will
per benefits.

[My Binders](#) [SIGN OUT:](#)

個人姓名

SEARCH

我的個人書夾，使用者可將文章儲存至書夾中，點選 My Binders 即可查看之前存入的文章

- **The ACM Guide to Computing Literature**, a comprehensive bibliographic database focused exclusively on the field of computing.
- A richly interlinked set of **connections** among authors, works, institutions, and specialized communities.

- [Using the ACM Digital Library](#)
- [For Consortia Administrators](#)

Announcements

Reproducibility in ACM Publications

[ACM Review and Badging Policy](#)

Sloan Project  ACM Digital Library Pilot Integrations:

- [ACM Pilot Demo 1 - Collective Knowledge: Packaging and Sharing](#)
- [ACM Pilot Demo 2 - OCCAM: Sharing and Modification](#)
- [ACM Pilot Demo 3 - Code Ocean: Code Modification and Derivation](#)

New Digital Library Resource Center

Advanced Search

Browse the ACM Publications:

- [Journals/Transactions](#)
- [Magazines](#)
- [Proceedings](#)
- [ACM Books](#)

登入後系統會顯示您的姓名，若使用完畢，請按下SIGN OUT 登出

Browse the Special Collections:

- [ACM International Conference Proceeding Series \(ICPS\)](#)
- [Classic Book Series](#)
- [ACM Oral History interviews](#)
- [ACM Curricula Recommendations](#)
- [NSF Workshop Reports](#)

Browse the [Hosted Content](#)

Browse all literature by type

Browse all literature by [Publisher](#)

Browse by the [ACM Computing Classification System](#)



[The Encyclopedia of Computer Science](#)
"...is the definitive reference in computer science and technology..."

於瀏覽文章時，個人帳號可以：

1. 設定Email alert
2. 將文章存取至個人書夾中

Excluded Grid Minors and Efficient Polynomial-Time Approximation Schemes

Full Text:  PDF  [Get this Article](#)

Authors: [Fedorr V. Fomin](#) [University of Bergen](#) [Bergen, Norway](#)
[Daniel](#)
[Saket S](#)

Published in:



Journal of the ACM (JACM) [JACM Homepage](#) [archive](#)
Volume 65 Issue 2, March 2018
Article No. 10
[ACM](#) New York, NY, US
[table of contents](#) [doi](#)

 2018 Article
Research

點選Email，當該本刊物有新的一期出版時，會寄發Email通知信給您

點選 Save to Binder 將該篇文章存取至您的個人書夾中

[My Binders](#) [SIGN OUT:](#) 

[SEARCH](#)

Tools and Resources

-  [Buy this Article](#)
-  [Recommend the ACM DL to your organization](#)
-  [Request Permissions](#)
- TOC Service:
 -  [Email](#)  [RSS](#)
-  [Save to Binder](#) [View My Binders](#)
- Export Formats:
 - [BibTeX](#) [EndNote](#) [ACM Ref](#)
- Share:
 -       

 [Contact Us](#) | Switch to [single page view](#) (no tabs)

[Abstract](#) [Authors](#) [References](#) [Cited By](#) [Index Terms](#) [Publication](#) [Reviews](#) [Comments](#) [Table of Contents](#)

Two of the most widely used approaches to obtain polynomial-time approximation schemes (PTASs) on planar graphs are the Lipton-Tarjan separator based approach and Baker's approach. In 2005, Demaine and Hajiaghayi strengthened both approaches using bidimensionality and obtained efficient polynomial-time approximation schemes (EPTASs) for several problems, including Connected Dominating Set and Feedback Vertex Set. In this work, we unify the two strengthened approaches to combine the best of both worlds. We develop a framework allowing the design of EPTAS on classes of graphs with the subquadratic grid minor (SQGM) property. Roughly speaking, a class of graphs has the SQGM property if, for every graph G from the class, the fact that G contains no $t \times t$ grid as a minor guarantees that the treewidth of G is subquadratic in t . For example, the class of planar graphs and, more generally, classes of graphs excluding some fixed graph as a minor, have the SQGM property. At the heart of our framework is a decomposition lemma stating that for "most" bidimensional problems on a graph class G with the SQGM property, there is a polynomial-time algorithm that, given a graph $G \in G$ as input and an $\epsilon > 0$, outputs a vertex set X of size $\epsilon \in \text{OPT}$ such that the treewidth of $G - X$ is $f(\epsilon)$. Here, OPT is the

ACM DIGITAL

My Binders SIGN OUT: [user profile]

SEARCH

Save to Binder

Name the new binder:

OR

Choose an existing binder:

Saving: Excluded Grid Minors and Efficient Polynomial-Time

Annotate this item:

樣式 格式

Excluded

Full Text:

Authors:

Published

Contact Us

Abstract

Two of the most important approaches to solving polynomial-time problems are based on the fact that a graph contains no $t \times t$ grid as a minor guarantees that the treewidth of G is subquadratic in t . For example, the class of planar graphs and, more generally, classes of graphs excluding some fixed graph as a minor, have the SQGM property. At the heart of our framework is a decomposition lemma stating that for "most" bidimensional problems on a graph class G with the SQGM property, there is a polynomial-time algorithm that, given a graph $G \in G$ as input and an $\epsilon > 0$, outputs a vertex set X of size $\epsilon \cdot \text{OPT}$ such that the treewidth of $G - X$ is $f(\epsilon)$. Here, OPT is the minimum size of a vertex set X such that $G - X$ has treewidth at most $f(\epsilon)$. This "most" condition is satisfied by a large class of problems, including the Lipton-Tarjan separator theorem and obtained efficient vertex Set. In this work, we show that if EPTAS on classes of graphs with the SQGM property, then we can obtain an FPTAS for the same class of problems.

save to binder

Buy this Article

Recommend the ACM DL to your organization

Request Permissions

TOC Service: Email RSS

Save to Binder

命名新書夾

選擇儲存在已經建立的書夾

可記錄個人對文章的註記、心得

My Binders

+ [Create a Binder](#)

[Cloud](#)

1 item

[iPhone](#)

2 items

[My Reading List](#)

1 item

► **System**

2 items

System

created: 2018-03-22 04:03:02.0

Export Formats: [\[BibTeX\]](#) [\[EndNote\]](#) [\[ACM Ref\]](#)

Create a PDF of all content in this binder: [\[Create PDF\]](#)

[\[view/edit binder description\]](#) [\[share binder\]](#)

Drag entries to reorder the contents. Click "save" to save changes.

‡ [Data Science: A Comprehensive Overview](#)

[Longbing Cao](#)

ACM Computing Surveys (CSUR)

Volume 50 Issue 3, October 2017

[\[view/edit annotation\]](#) [\[remove item\]](#) added to binder 2018-03-22 04:05:09.0

‡ [Excluded Grid Minors and Efficient Polynomial-Time Approximation Schemes](#)

[Fedorr V. Fomin](#), [Daniel Lokshtanov](#), [Saket Saurabh](#)

Journal of the ACM (JACM)

Volume 65 Issue 2, March 2018

[\[view/edit annotation\]](#) [\[remove item\]](#) added to binder 2018-03-22 04:03:03.0

點選 My Binder 可進入個人書夾查看已存取的文章，並可選擇刪除已存的書夾/文章，或重新編輯註解

My Binders

+ [Create a Binder](#)

[Cloud](#)

1 item

[iPhone](#)

2 items

[My Reading List](#)

1 item

► [System](#)

2 items

System created: 2018-03-22 04:03

Export Formats: [\[BibTeX\]](#) [\[EndNote\]](#) [\[PDF\]](#)

Create a PDF of all content in this binder: [\[create pdf\]](#)

[\[view/edit binder description\]](#) [\[share binder\]](#) [\[delete binder\]](#)

To share this binder, add a user's email address to the shared binder list:

email address [add to list](#)

Note: An email will not be sent. The invitation will appear on the users "My Binders" screen.

Shared binder user listing: (shared with 0 users)

Drag entries to reorder the contents. Click "save" when complete. [\[save ordering\]](#)

↓ [Data Science: A Comprehensive Overview](#)

[Longbing Cao](#)

ACM Computing Surveys

Volume 50 Issue 3, October 2017

[\[view/edit annotation\]](#)

↓ [Excluded Grid Minors and the Grid](#)

[Fedorr V. Fomin](#), [Daniel Lokshtanov](#), [Saket Saurabh](#)

Journal of the ACM (JACM)

Volume 65 Issue 2, March 2018

[\[view/edit annotation\]](#)

[\[remove item\]](#)

added to binder 2018-03-22 04:03:03.0

可以將書夾和他人共享，前提是雙方都要有註冊ACM 個人帳號

輸入對方註冊ACM個人帳號所使用的e-mail

My Binders

[+ Create a Binder](#)[Cloud](#)

1 item

[iPhone](#)

2 items

[My Reading List](#)

1 item

System

2 items

System created: 2018-03-22 04:03:02.0

Export Formats: [\[BibTeX\]](#) [\[EndNote\]](#) [\[ACM Ref\]](#)Create a PDF of all content in this binder: [\[Create pdf\]](#)[\[view/edit binder description\]](#) [\[share binder\]](#) [\[delete binder\]](#)

To share this binder, add a user's email address to the shared binder list:

email address [add to list](#)

Note: An email will not be sent. The invitation will appear on the users "My Binders" screen.

Shared binder user listing: (shared with 1 user)

email address	invited date	replied date	status	remove
 @igrouptaiwan.com	22-MAR-2018	22-MAR-2018	Invited	☐
remove checked users				

Drag entries to reorder the contents. Click "save ordering" when complete. [\[save ordering\]](#)

Data Science: A Comprehensive Overview

[Longbing Cao](#)

ACM Computing Surveys (CSUR)

Volume 50 Issue 3, October 2017

[\[view/edit annotation\]](#) [\[remove item\]](#) added to binder 2018-03-22 04:05:09.0

Excluded Grid Minors and Efficient Polynomial-Time Approximation Schemes

[Fedorr V. Fomin](#), [Daniel Lokshtanov](#), [Saket Saurabh](#)

Journal of the ACM (JACM)

Volume 65 Issue 2, March 2018

[\[view/edit annotation\]](#) [\[remove item\]](#) added to binder 2018-03-22 04:03:03.0

 My Binders[+ Create a Binder](#)[+ Add a colleague's binder](#)

► Cloud

1 item

[iPhone](#)

2 items

[My Reading List](#)

1 item

[System](#)

2 items

Cloud

created: 2014-09-24 05:22:42.0

Export Formats: [\[BibTeX\]](#) [\[EndNote\]](#) [\[ACM Ref\]](#)Create a PDF of all content in this binder: [\[Create pdf\]](#)[\[view/edit binder description\]](#) [\[share binder\]](#) [\[delete binder\]](#)

Drag & drop

↓ [Intercom](#)[Adel Na](#)

ACM Co

Volume

[\[view/edit annotation\]](#) [\[remove item\]](#) added to binder 2014-09-24 05:22:42.0

當對方已對您送出分享書夾的邀請，您登入帳號後即可看到此加入的選項

My Binders

[+ Create a Binder](#)[+ Cancel](#)

You have been invited by the owners to share the following binders:

binder	owner	action
Games	Lan 	☒ accept ☐ reject
save		

Cloud

1 item

[iPhone](#)

2 items

[My Reading List](#)

1 item

[System](#)

2 items

Cloud created: 2014-09-24 05:22:42.0

Export Formats: [\[BibTeX\]](#) [\[EndNote\]](#) [\[ACM Ref\]](#)Create a PDF of all content in this binder: [\[Create pdf\]](#)[\[view/edit binder description\]](#) [\[share binder\]](#) [\[delete binder\]](#)Drag entries to reorder the contents. Click "save ordering" when complete. [\[save ordering\]](#)‡ [Interconnected Cloud Computing Environments: Challenges, Taxonomy, and Survey](#)[Adel Nadjaran Toosi](#), [Rodrigo N. Calheiros](#), [Rajkumar Buyya](#)

ACM Computing Surveys (CSUR)

Volume 47 Issue 1, July 2014

[\[view/edit annotation\]](#) [\[remove item\]](#) added to binder 2014-09-24 05:22:42.0

My Binders

[+ Create a Binder](#)[Cloud](#)

1 item

[Games](#)1 item [iPhone](#)

2 items

[My Reading List](#)

1 item

[System](#)

2 items

Games

owner: Lan  created: 2018-03-22 05:48:17.0Export Formats: [\[BibTeX\]](#) [\[EndNote\]](#) [\[ACM Ref\]](#)Create a PDF of all content in this binder: [\[Create pdf\]](#)[\[view binder description\]](#) [\[remove binder\]](#)[Reconstructing the world in 3D: bringing games with a pur](#)[Kathleen Tuite, Noah Snaveley, Dun-Yu Hsiao, Adam M. S](#)HCOMP '10 Proceedings of the ACM SIGKDD Workshop
2010

added to binder 2018-03-22 05:48:17.0

當你接受對方的邀請後，即可看到對方的書夾中存取的文章資訊



ACM BOOKS a dynamic new series of advanced level books in computer science, published by ACM in collaboration with Morgan & Claypool Publishers.

[learn more about the program](#) | [check out the books](#)

The ACM DL app for Android, iOS and Windows is now available (and free).

As an ACM DL user:

1. [Sign-in or Sign-up](#) to the ACM DL with your ACM Web Account now.
2. Install the ACM DL app onto your device.
3. [Sign in](#) (send ACM DL app with your ACM Web Account).



DONE—You now have access to the ACM DL on your mobile device.



Recently loaded issues and proceedings:

(available in the DL within the past 2 weeks)

ACM Transactions on Accessible Computing (TACCESS)

[Volume 11 Issue 1](#)

ACM Transactions on Algorithms (TALG)

[Volume 14 Issue 2](#)

ACM Transactions on Database Systems (TODS)

[Volume 43 Issue 1](#)

Queue

[Volume 16 Issue 1](#)

Ubiquity

Volume 16 Issue 1



Institutional Profile Pages Beta

ACM releases new feature giving snapshot of an Institution's contribution to the field.

Computing Reviews

Access [critical reviews](#) of computing literature.

[Become a reviewer](#) for Computing Reviews

由ACM DL首頁最下方的**Computing Reivews**連結進入

SEARCH

Searched for iphone [\[new search\]](#) [\[edit/save query\]](#)

[\[advanced search\]](#)

Searched The ACM Full-Text Collection: 492,393 records [\[Expand your search to The ACM Guide to Computing Literature: 2,756,298 records\]](#) [?](#)

408 results found

Export Results: [bibtex](#) | [endnote](#) | [acmref](#) | [csv](#)

 [23 videos found](#)

Result 1 – 20 of 408

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [>>](#)

Sort by: [relevance](#) ▼

Refine by People

[Names](#) ▶

[Institutions](#) ▶

[Authors](#) ▶

[Reviewers](#) ▶

Refine by Publications

[Publication Names](#) ▶

[ACM Publications](#) ▶

[All Publications](#) ▶

[Content Formats](#) ▶

[Publishers](#) ▶

Refine by Conferences

[Sponsors](#) ▶

[Events](#) ▶

[Proceeding Series](#) ▶

Refine by Publication Year



1 [Constant connectivity, selective participation: mobile-social interaction of students and faculty](#)



[Dana Rotman](#)

April 2010 CHI EA '10: CHI '10 Extended Abstracts on Human Factors in Computing Systems

Publisher: ACM

Bibliometrics: Citation Count: 3

Downloads (6 Weeks): 4, Downloads (12 Months): 35, Downloads (Overall): 356

Full text available:  [PDF](#)

beyond voice and textual communication, by enabling ubiquitous online connectivity and changing mediated social interaction. We report the results of a study of the mobile-social practices of students who use such devices, and the ways in which hierarchical relationships between students and professors were affected by the use of smart-mobile ...

Keywords: iphone

[\[result highlights\]](#)

2 [A native iPhone packbot OCU](#)



[Rodrigo Gutierrez](#), [Jeff Craighead](#)

March 2009 HRI '09: Proceedings of the 4th ACM/IEEE international conference on Human robot interaction

Publisher: ACM

Bibliometrics: Citation Count: 5

Downloads (6 Weeks): 1, Downloads (12 Months): 21, Downloads (Overall): 579

Full text available:  [PDF](#)

This video abstract discusses the details of the implementation of a Packbot operator control unit (OCU) using Apple's official iPhone SDK.

Keywords: iPhone, robot, touch screen

[\[result highlights\]](#)

Searched for iphone [new search] [edit/save query]

[\[advanced search\]](#)

Searched The ACM Full-Text Collection: 492,393 records [Expand your search to The ACM Guide to Computing Literature: 2,756,298 records] ?

408 results found

Export Results: [bibtex](#) | [endnote](#) | [acmref](#) | [csv](#) [23 videos found](#)

Result 1 – 20 of 408

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) >>Sort by: [relevance](#) ▼

Refine by People

Names ▶

Institutions ▶

Authors ▶

Reviewers [Bowditch, John R. \(1\)](#)[Chang, Ruay-Shiung \(1\)](#)[Esteve Rothenberg, Christian \(1\)](#)[Godwin, Stewart Mark \(1\)](#)[Kurfess, Franz J. \(1\)](#)[Macfadyen, Alyx \(1\)](#)[Malaviya, Anoop kumar \(1\)](#)[Mani, Ganapathy \(1\)](#)[Manrique, Cecilia G. \(1\)](#)[Mihalo, William Edward \(1\)](#)[Moody, Scott Arthur \(1\)](#)[Popescu, George \(1\)](#)[Solanas, Agusti \(1\)](#)[Weippl, Edgar R. \(1\)](#)

Refine by Publications

Publication Names ▶

ACM Publications ▶

All Publications ▶

1 [Constant connectivity, selective participation: mobile-social interaction of students and faculty](#) [Dana Rotman](#)

April 2010 CHI EA '10: CHI '10 Extended Abstracts on Human Factors in Computing Systems

Publisher: ACM**Bibliometrics:** Citation Count: 3

Downloads (6 Weeks): 4, Downloads (12 Months): 35, Downloads (Overall): 356

Full text available:  PDF

beyond voice and textual communication, by enabling ubiquitous online connectivity and changing mediated social interaction. We report the results of a study of the mobile-social practices of students who use such devices, and the ways in which hierarchical relationships between students and professors were affected by the use of smart-mobile ...

Keywords: iphone[\[result highlights\]](#)2 [A native iPhone packbot OCU](#) [Rodrigo Gutierrez, Jeff Craighead](#)

March 2009 HRI '09: Proceedings of the 4th ACM/IEEE international conference on Human robot interaction

Publisher: ACM**Bibliometrics:** Citation Count: 5

Downloads (6 Weeks): 1, Downloads (12 Months): 21, Downloads (Overall): 579

Full text available:  PDF

This video abstract discusses the details of the implementation of a Packbot operator control unit (OCU) using

Searched for iphone [\[new search\]](#) [\[edit/save query\]](#)[\[advanced search\]](#)Searched The ACM Full-Text Collection: 492,393 records [\[Expand your search to The ACM Guide to Computing Literature: 2,756,298 records\]](#) ?**Refinements** [\[remove all\]](#) click each refinement below to remove

Reviewers: Kurfess, Franz J

1 results found

Export Results: [bibtex](#) | [endnote](#) | [acmref](#) | [csv](#)**Refine by People**[Names ▶](#)
[Institutions ▶](#)
[Authors ▶](#)
[Reviewers ▶](#)**Refine by Publications**[Publication Names ▶](#)
[ACM Publications ▶](#)
[All Publications ▶](#)
[Content Formats ▶](#)
[Publishers ▶](#)**Refine by Conferences**

Result 1 – 1 of 1

Sort by: [relevance](#) ▼**1** [Differences and Similarities between Finger and Pen Stroke Gestures on Stationary and Mobile devices](#)[Huawei Tu](#), [Xiangshi Ren](#), [Shumin Zhai](#)

August 2015 ACM Transactions on Computer-Human Interaction (TOCHI): Volume 22 Issue 5, October 2015

Publisher: ACM**Bibliometrics:** Citation Count: 5

Downloads (6 Weeks): 8, Downloads (12 Months): 101, Downloads (Overall): 562

Full text available: [PDF](#)

This study investigated differences and similarities between finger and pen gestures on stationary devices (sitting posture) and mobile devices (sitting and walking postures). The recorded gestures were analyzed according to multiple gesture features. We found (1) pen and index finger gestures were different in features like size ratio but similar ...

Keywords: Pen gestures, mobile devices, finger gestures, gesture design[\[result highlights\]](#)

Result 1 – 1 of 1

Published in:



• Proceeding
[HCOMP '10](#) Proceedings of the ACM SIGKDD Workshop on Human Computation
Pages 41-44

Washington DC — July 25 - 25, 2010

[ACM](#) New York, NY, USA ©2010

[table of contents](#) ISBN: 978-1-4503-0222-7 doi>[10.1145/1837885.1837898](#)

Export Formats:

[BibTeX](#) [EndNote](#) [ACM Ref](#)

Upcoming Conference:

[KDD '18](#)

Share:

[Author Tags](#) ▼[Similar Patents and Articles](#) ▼

進入文章頁面後，再點選Reviews標籤

[Contact Us](#) | Switch to [single page view](#) (no tabs)

Abstract

Authors

References

Cited By

Index Terms

Publication

Reviews

Comments

Table of Contents

Reviewer: John R Bowditch

Tuite et al. pose the following question: "Can games be used to achieve massive data-acquisition tasks when played in the real world, away from standard consoles?" Although many researchers are asking similar questions, this paper approaches the problem in a unique way.

The paper covers alternate reality games (ARGs), a relatively new gaming genre. In Tuite et al.'s game *PhotoCity*, "players take photos to capture flags and take over virtual models of real buildings." *PhotoCity* is a hybrid ARG because it is designed as a "[game] with a purpose [GWAP]."

The paper's groundbreaking research recognizes the importance of point cloud modeling. *PhotoCity*'s core technology extracts three-dimensional (3D) models from two-dimensional (2D) digital images, using a computer vision system. Although the models have some visible deficiencies, such as low-quality renderings and empty sets in meshes, the advancements made are still noteworthy. Another accomplishment is the successful launch of an iPhone *PhotoCity* application, which is available on iTunes.

Researchers interested in point modeling and ARGs will find this paper insightful. The authors assume that the reader has a fundamental knowledge of point clouds and game design elements; that being said, the supporting references help with this prerequisite.

[Online Computing Reviews Service](#)**Computing
Reviews**Access [critical reviews](#) of computing literature.[Become a reviewer](#) for Computing ReviewsPowered by **THE ACM GUIDE TO COMPUTING LITERATURE**

網頁自動連結開啟Computing Reviews的頁面

Loud

TODAY'S ISSUE

HOT TOPICS

SEARCH

BROWSE

RECOMMENDED

MY ACCOUNT

LOGIN

REVIEW

?

Review

Search

**Reconstructing the world in 3D: bringing games with a purpose outdoors**

[Tuite K.](#), [Snaveley N.](#), [Hsiao D.](#), [Smith A.](#), [Popović Z.](#) KDD-HCOMP 2010 (Proceedings of the ACM SIGKDD Workshop on Human Computation, Washington, DC, Jul 25, 2010) 41-44. 2010. Type: Proceedings

Date Reviewed: Oct 28 2010

Full Text

Tuite et al. pose the following question: "Can games be used to achieve massive data-acquisition tasks when played in the real world, away from standard consoles?" Although many researchers are asking similar questions, this paper approaches the problem in a unique way.

The paper covers alternate reality games (ARGs), a relatively new gaming genre. In Tuite et al.'s game *PhotoCity*, "players take photos to capture flags and take over virtual models of real buildings." *PhotoCity* is a hybrid ARG because it is designed as a "[game] with a purpose [GWAP]."

The paper's groundbreaking research recognizes the importance of point cloud modeling. *PhotoCity*'s core technology extracts three-dimensional (3D) models from two-dimensional (2D) digital images, using a computer vision system. Although the models have some visible deficiencies, such as low-quality renderings and empty sets in meshes, the advancements made are still noteworthy. Another accomplishment is the successful launch of an iPhone *PhotoCity* application, which is available on iTunes.

Recommendations

★ Reviewer Selected

Related Topics

Browse

Alerts

[Games \(K.8.0 ...\)](#)

Add

[Shape \(I.4.8 ...\)](#)

Add

Manage Alerts

More Alerts

Thank You!