# Research Methods in computer science Fall 2021

Lecture 21

Omprakash Gnawali November 3, 2021

## Agenda

**Conference Updates** 

Co-authorship

**Disclosures** 

Human subject research responsibility

**HW10** 

## Co-authorship

#### **Green Enterprise Computing Data: Assumptions and Realities**

Maria Kazandjieva, Brandon Heller, Omprakash Gnawali \*, Philip Levis, and Christos Kozyrakis Stanford University, \*University of Houston mariakaz, brandonh, pal, christos@cs.stanford.edu, \* gnawali@cs.uh.edu

Who did the work?

#### Contribution levels

Co-author
Acknowledgment

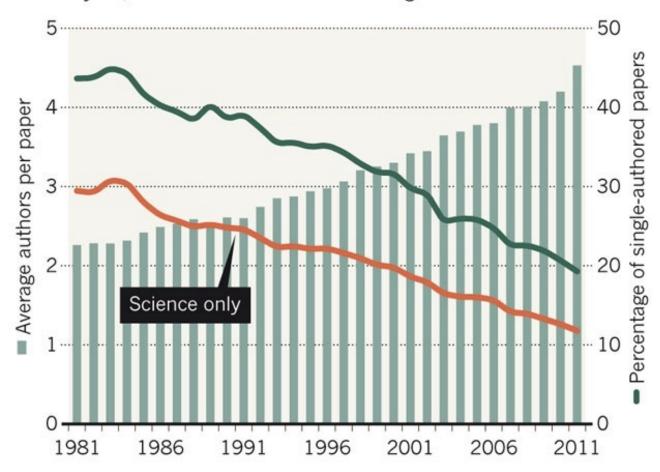
## Order of authors Convention may vary across fields

Sunday, October 9, 2016		
7:30 - 8:45	Continental Breakfast - Prefunction (outside Garden State)	
	Session 1.1a - Regency BC	Session 1.1b - Garden State ABC
9:00 - 9:20	Bounded-Communication Leakage Resilience via Parity-Resilient Circuits Vipul Goyal, Yuval Ishai, Hemanta K. Maji, Amit Sahai, Alexander Sherstov, Hemanta Maji	Strong Fooling Sets for Multi-Player Communication with  Applications to Deterministic Estimation of Stream Statistics  Amit Chakrabarti, Sagar Kale
9:25 - 9:45	Indistinguishability Obfuscation from DDH-like Assumptions on Constant-Degree Graded Encodings Huijia Lin, Vinod Vaikuntanathan	Edit Distance: Sketching, Streaming and Document Exchange Djamal Belazzougui, Qin Zhang
9:50 - 10:10	Breaking the Three Round Barrier for Non-Malleable Commitments Vipul Goyal, Dakshita Khurana, Amit Sahai	Heavy Hitters via Cluster-preserving Clustering Kasper Green Larsen, Jelani Nelson, Huy L. Nguyen, Mikkel Thorup
10:15 - 10:35	Zero-knowledge Proof Systems for QMA Anne Broadbent, Zhengfeng Ji, Fang Song, John Watrous	Optimal Quantile Approximation in Streams  Zohar Karnin, Kevin Lang, Edo Liberty

http://dimacs.rutgers.edu/FOCS16/Program/schedule.html
Notice the order of authors

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The average number of authors on a research paper rose to 4.5 last year; fewer than one in five were single-authored.



http://www.nature.com/news/seven-days-3-9-august-2012-1.11139#/trend

Lots of coauthors...

http://journals.aps.org/prl/pdf/10.1103/PhysRevLett.114.191803

http://www.g3journal.org/content/5/5/719

#### The NEW ENGLAND JOURNAL of MEDICINE

ventricular dysfunction as f computed tomography. aimed to address concerns gulants may confer a higher ong patients with renal imody weight. We identified ifth of patients with these of the daily dose of edoxaained efficacy with signifithan that observed in the

actice with the comparator, rin therapy was proactively it the study. This resulted in the therapeutic range of to standard therapy with warfarin after initial heparin, with significantly less bleeding.

Supported by Daiichi-Sankyo.

Dr. Büller reports receiving consulting fees from Bayer, Boehringer Ingelheim, Bristol-Myers Squibb, Isis Pharmaceuticals, and ThromboGenics, and grant support from Bayer and Pfizer. Dr. Décousus reports receiving fees for board membership from Bayer and Daiichi Sankyo, lecture fees from GlaxoSmithKline, and grant support from Bayer, Bristol-Myers Squibb-Pfizer, Boehringer Ingelheim, and Portola. Drs. Grosso, Mercuri, Schwocho, and Shi report being employees of Daiichi Sankyo. Dr. Middeldorp reports receiving consulting fees from Bayer and Bristol-Myers Squibb-Pfizer, lecture fees from Bayer, GlaxoSmithKline, Bristol-Myers Squibb-Pfizer, and Boehringer Ingelheim, and grant support from GlaxoSmithKline, Bristol-Myers Squibb-Pfizer, and Sanquin. Dr. Prins reports receiving consulting fees from Bayer, Pfizer, and Boehringer Ingelheim, and lecture fees from Bayer. Dr. Raskob reports receiving consulting fees and travel support from Bayer, Bristol-Myers Squibb, Janssen, Johnson & Johnson, Pfizer, Sanofi-

Financial disclosure to understand potential conflict of interest

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names of collaborators if they are listed in Acknowledgments.

Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship.

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Additional Supporting Information may be found in the online version of this article.

\*Correspondence to: Dr. Rodger Elble, Department of Neurology, Southern Illinois University School of Medicine, 751 North Rutledge, PO Box 19643, Springfield, IL 62794-9643, USA; relble@siumed.edu Funding agencies: This study was supported by a grant from GlaxoSmithKline.

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Please indicate each author's contribution(s) to the manuscript, using the numbered list below.

- 1. Conception and design
- 2. Provision of study material or patients
- 3. Collection and/or assembly of data
- 4. Data analysis and interpretation
- 5. Manuscript writing
- 6. Final approval of manuscript
- 7. Other (financial and administrative support)

Author's Name	Contribution(s) (Use item numbers from above.)	

#### 7 Acknowledgments

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Use Acknowledgments for more than listing the grants

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## Human Subject Research

Recap from last time

**Examples in Computer Science research** 

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