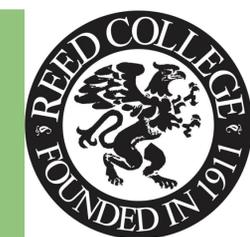


Gender Representation in Computer Systems Publications

Rhody Kaner with Eitan Frachtenberg, Reed College Computer Science Department



Background

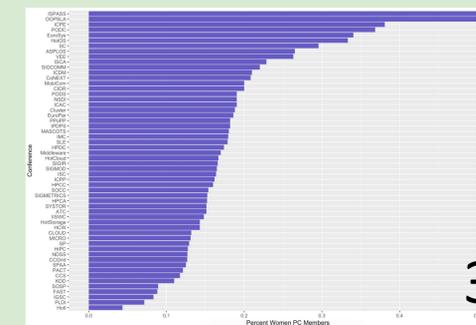
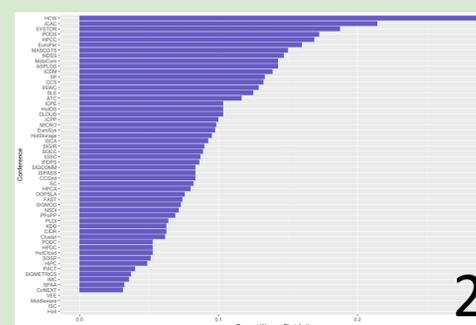
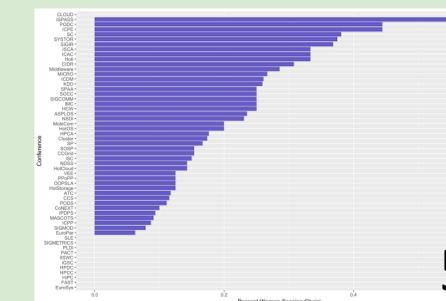
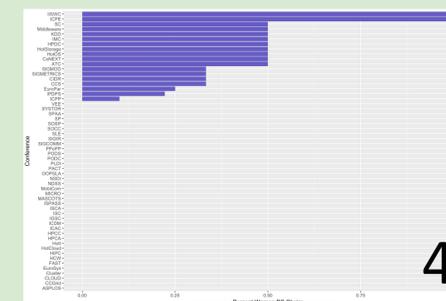
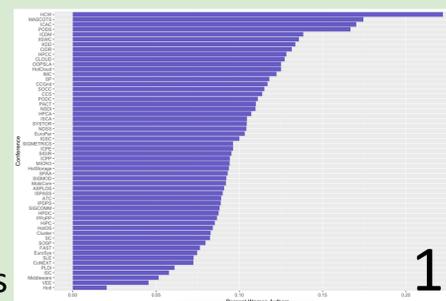
- Gender representation in CS has declined since the advent of personal computers in the 1980s and CS disciplines overall have approximately 20% women
- Computer Systems anecdotally has less gender diversity than other fields of CS

Central Question: What factors appear to either contribute to or detriment gender diversity within Computer Systems conferences and publications?

Methodology and Data: Manually collected data detailing names, genders, and roles of participants in 56 Systems conferences in 2017

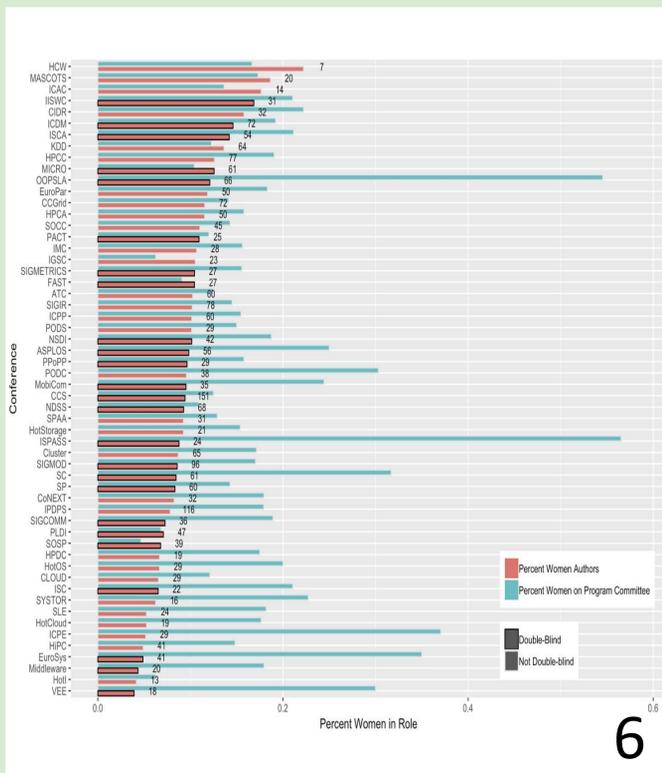
Representation by Conference Role

- Conferences have on average 10.5% women authors (Fig. 1) and 10.6% women first authors (Fig. 2)
- Higher percentages of women as PC chair and Session chair, 17.7% and 17.3% , respectively (Fig. 4 and Fig. 5)
- More likely that the percentage of women authors (10.5%) is closer to the 'true' percentage than the percentage in service roles



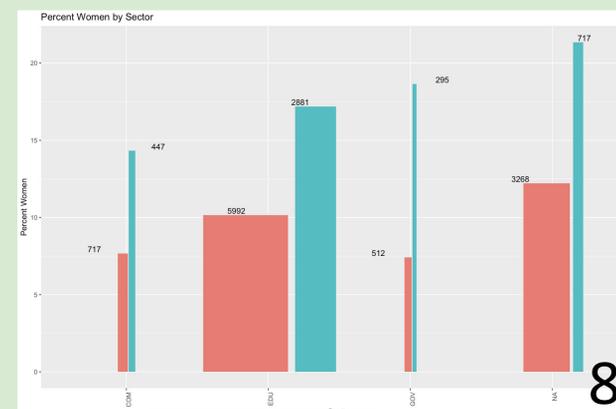
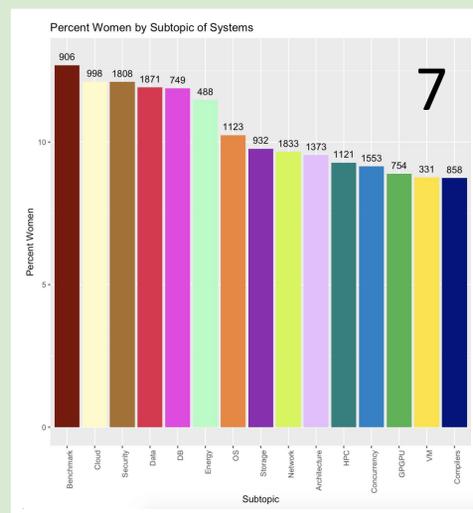
Effect of Double-blind Reviewing

A Pearson correlation of 0.99 between double-blind reviewing and women authors suggests no relationship between the two. This result disagrees with some studies that find double-blind policies to increase gender diversity



Representation by Subtopic and Sector

Subtopics that are more “systems-y” (more focused on technical aspects of systems) appear to have fewer women (Fig. 7)



While most papers are published from academia, papers published by government organizations have slightly better gender representation (Fig. 8)

Conclusions:

- Representation of women is lower in Computer Systems than in CS overall
- Representation is higher in service roles, but author percentage of 10.5% is likely closer to 'true' representation
- Double-blind policies do not appear to increase gender diversity
- Architecture and other very “systems-y” subtopics appear to have lower representation
- Detailed analysis in forthcoming paper

Acknowledgements

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