

Organizers

- Paul Rosenthal (moderator)
- Wolfgang Aigner
- Carlos Scheidegger
- David Koop

General Thoughts/Findings by Participants

- reproducibility is far away from being perfect in visualization
- one big reason might be lack of reward
- also NSF backed the need for better reproducibility

Related Investigated Initiatives at other Venues

- SIGMOD <http://db-reproducibility.seas.harvard.edu/> (ACM SIGMOD International Conference on Management of Data)
- PLDI (ACM SIGPLAN conference on Programming Language Design and Implementation)
- PPOPP (ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming)
- POPL <http://popl15-aec.cs.umass.edu/about/> (ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages)
- <http://www.replichi.com/> (review of proceedings, 2014 workshop was cancelled, 2015 nothing)
- <http://www.artifact-eval.org>
- ACM TOMS <http://www.sandia.gov/~maherou/docs/TomsRcrEditorIntro.pdf>
- IEEE VIS/ICSE (International Conference on Software Maintenance and Evolution)
- COS (Center for Open Science)

Summary of Related Initiatives (Opinions)

- Publicity
 - dedicated website explains WHAT, WHY, DETAILED PROCESS (SIGMOD, PLDI, PPOPP, POPL)
- Reward
 - distinguished papers get “reproducible label” in the DL (SIGMOD)
 - badge at the paper (PLDI, PPOPP, POPL)
 - ~~distinct award for the best artifact (ICSE)~~
- Obligation of Submission
 - voluntary (SIGMOD, PLDI, PPOPP, POPL)
 - ~~obligatory (many natural sciences like biochemistry)~~

- Submission Time
 - after acceptance notification for specified period (SIGMOD, PLDI, PPOPP, POPL)
 - ~~○ with the original paper~~
 - ~~○ before the actual study, preregistration (some social sciences, psychology)~~
- Submission System
 - paper submission system (SIGMOD, PPOPP, POPL)
 - separate system
- Submission Format
 - determined in close cooperation with reviewer (SIGMOD)
- Submission Content
 - white box or black box with full specification (system, environment) (SIGMOD, PLDI, PPOPP, POPL)
 - test data (SIGMOD)
 - set of experiments to reproduce the raw results (SIGMOD, PLDI, PPOPP)
 - steps to transform the raw data into the results in the paper (SIGMOD)
 - flexibility report, which types of data and platforms are covered (SIGMOD)
 - video of reproducing process (PLDI, PPOPP)
 - detailed description of sample, experimental setup for user studies
 - material used for the study
 - study log
 - raw study data/measurements
- Acceptance Criteria
 - reproducible behavior should match the paper conclusions (SIGMOD, PLDI, PPOPP, POPL)
- Reviewer Pool
 - independent but not disjoint from paper reviewers (SIGMOD, PLDI, PPOPP, POPL)
 - mainly young academics
- Review Management
 - dedicated steering committee (SIGMOD, PLDI, PPOPP, POPL)
- Reviewer Assignment
 - 1 per paper (SIGMOD)
 - 2 per artifact (PPOPP, POPL)
 - 3 per artifact (ICSME)
- Review Process
 - close collaboration between reviewer and authors, iterative feedback (SIGMOD)
 - ~~○ one-time feedback round only (PLDI, PPOPP, POPL)~~
- Statistics
 - 10 submissions from 60 accepted papers, all successful (SIGMOD)
 - 29 submissions, 27 successful (POPL)
- Long Term
 - publish stuff on your own (PPOPP)
 - dedicated website with links to published artifacts (POPL)
 - force to provide with open source license (ICSME)