

A street performer wearing a straw hat and blue sunglasses is playing a guitar that has been modified with various instruments like a keyboard and a ukulele. He is smiling and appears to be singing.

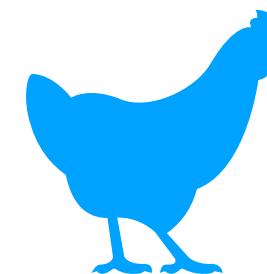
Auomated Patch Testing with Personal CI

a.k.a VCMBDD

VC-Money-Burning Driven Development

Daniel Gustafsson

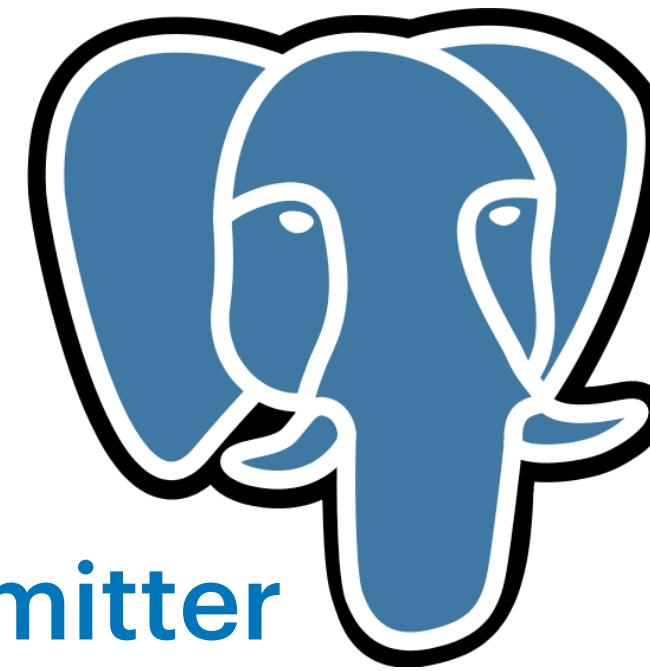
Daniel Gustafsson



@d_gustafsson



daniel@yesql.se



Committer



Committer ✨ Security Team

Public service announcement

**This presentation is generic, there is
nothing Postgres specific about this setup**

Patch

Hacking



Hacking

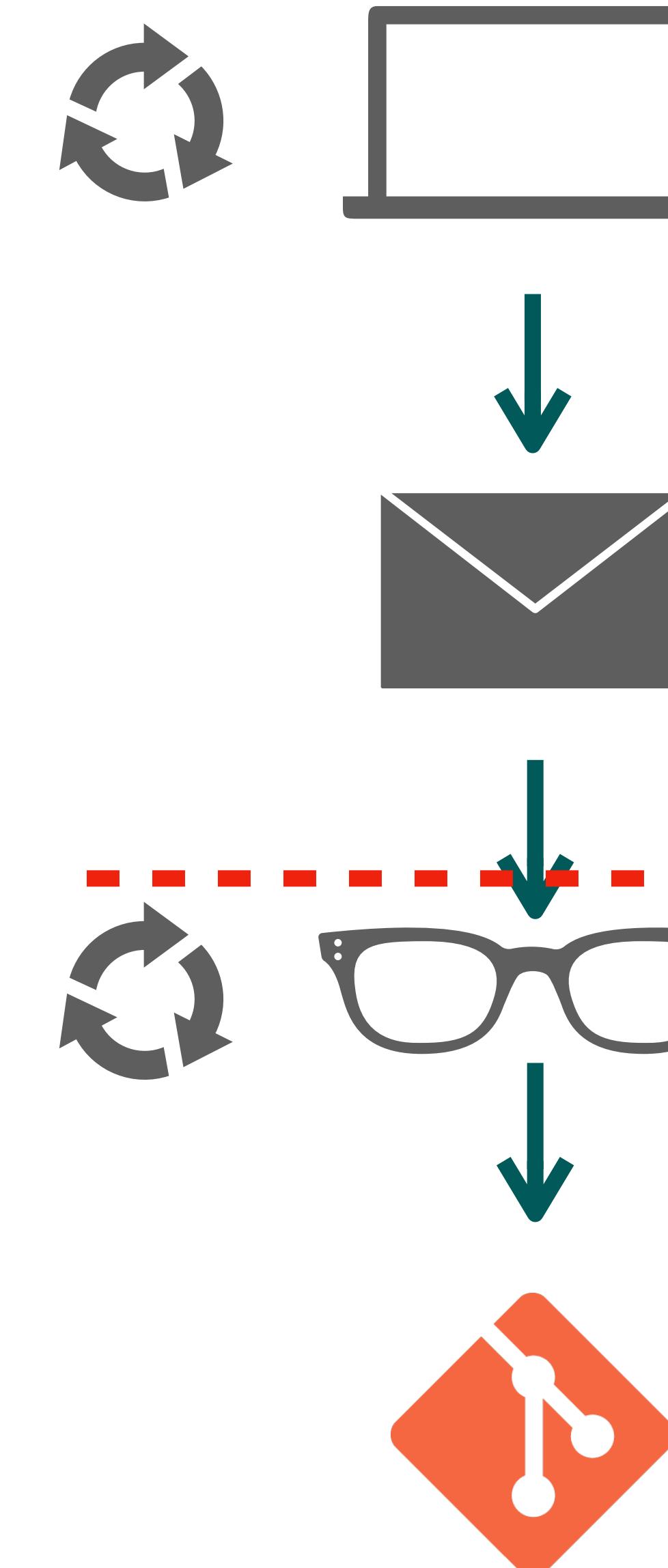
-hackers submission

Commitfest review

PostgreSQL master

Patch Hacking

Hacking



Hacking

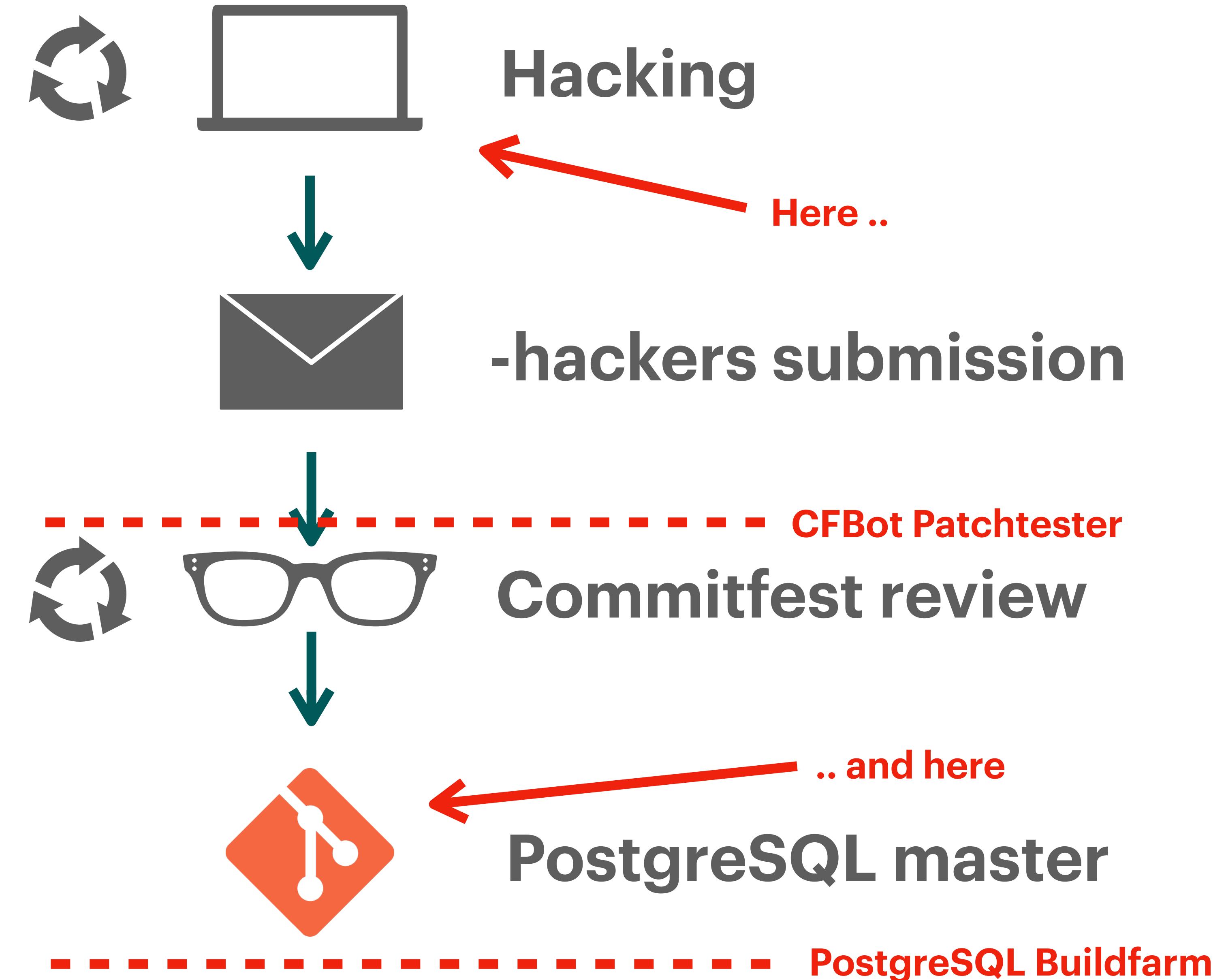
-hackers submission

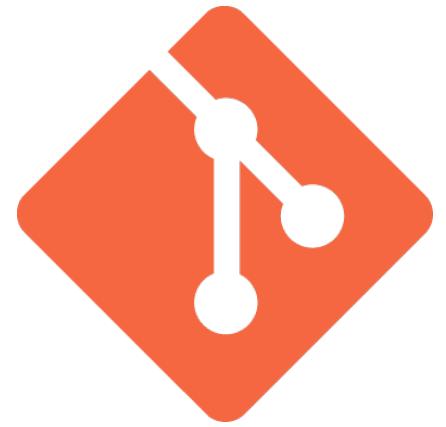
CFBot Patchtester
Commitfest review

PostgreSQL master

PostgreSQL Buildfarm

Patch Hacking





Pushing to PostgreSQL master Git repo

```
$ make -s distclean  
$ git pull --rebase  
$ git checkout -b dg-<patchname>  
$ patch -p1 < <patchfile>  
$ git add -p  
$ git commit -v  
$ ./configure ..  
$ make -s install  
$ make check-world
```



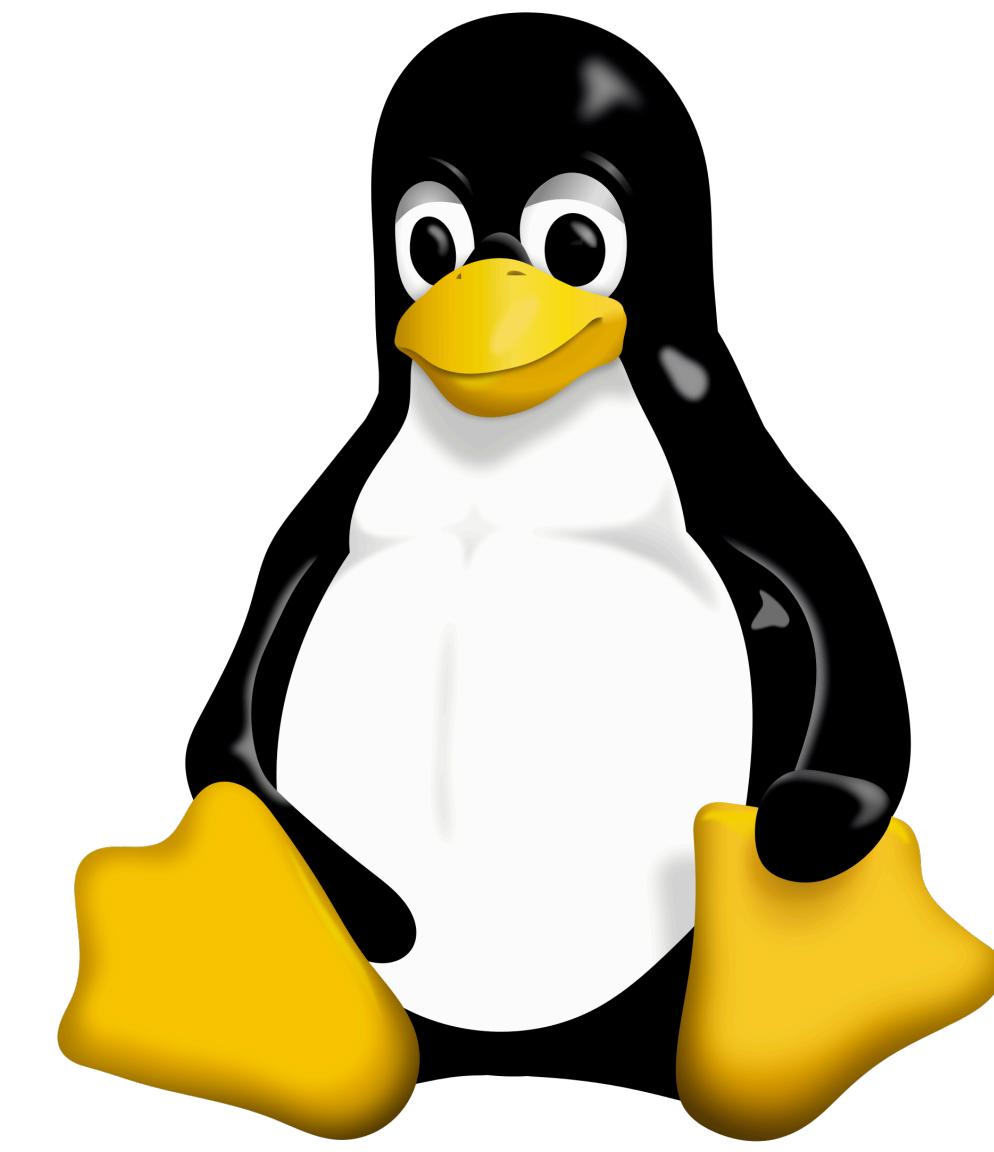
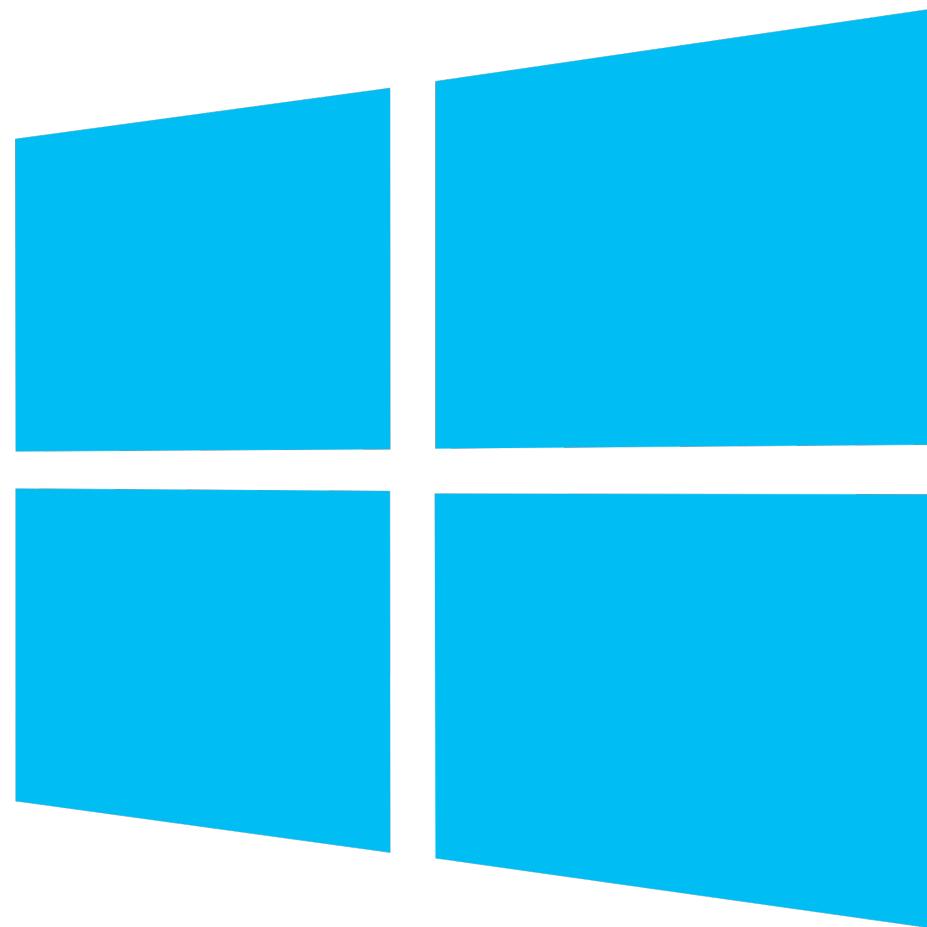
```
$ git push origin dg-<patchname>:master --dryrun  
$ git show A..B --format=fuller  
$ git commit --amend --reset --reset-author
```



..for every supported branch

- ❖ origin/REL9_6_STABLE
- ❖ origin/REL_10_STABLE
- ❖ origin/REL_11_STABLE
- ❖ origin/REL_12_STABLE
- ❖ origin/REL_13_STABLE
- ❖ origin/REL_14_STABLE
- ❖ origin/master

..for every major platform



..and often multiple OpenSSL versions



1.0.1



1.0.2



1.1.1

COMBINATORICS AND NUMBER THEORY OF COUNTING SEQUENCES

István Mező

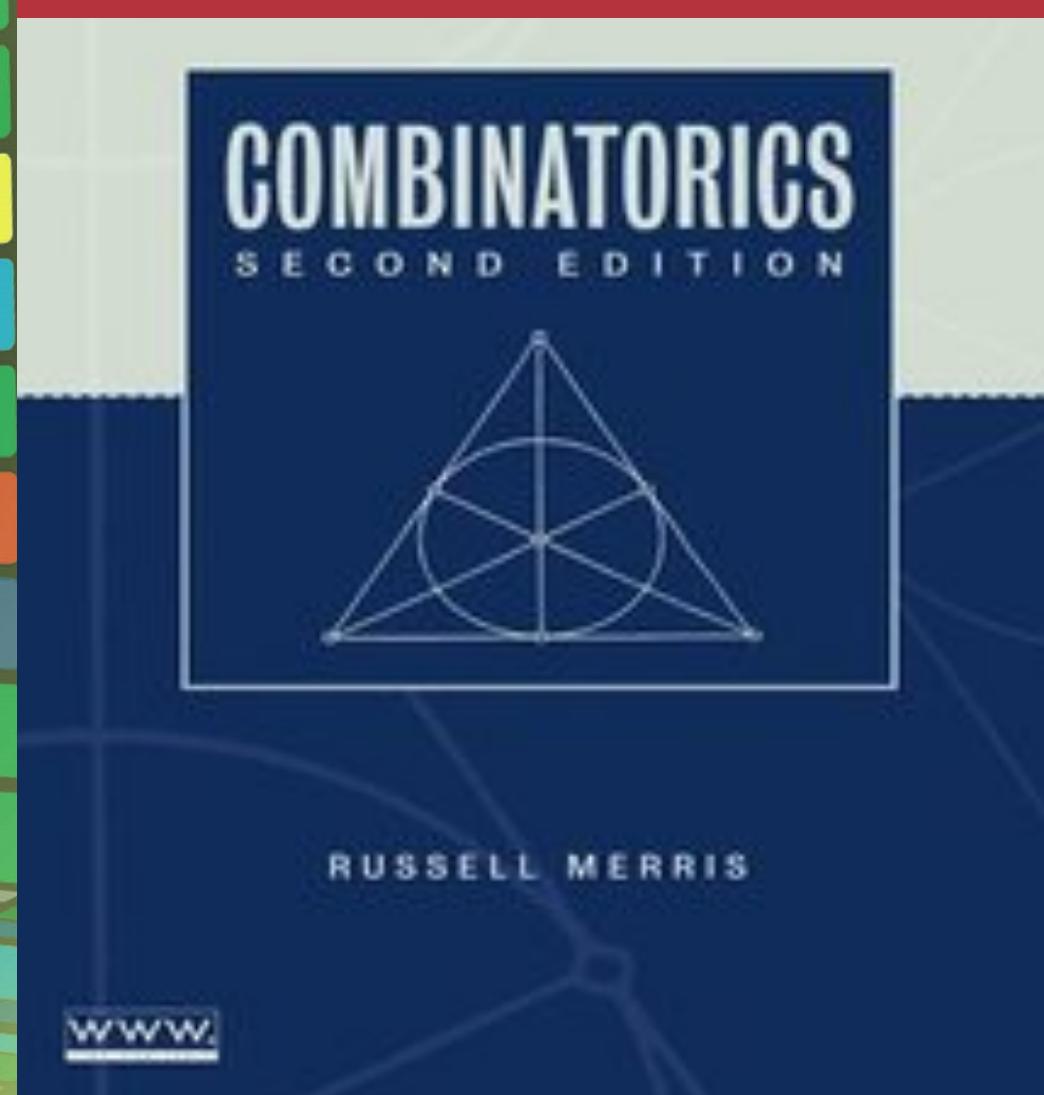
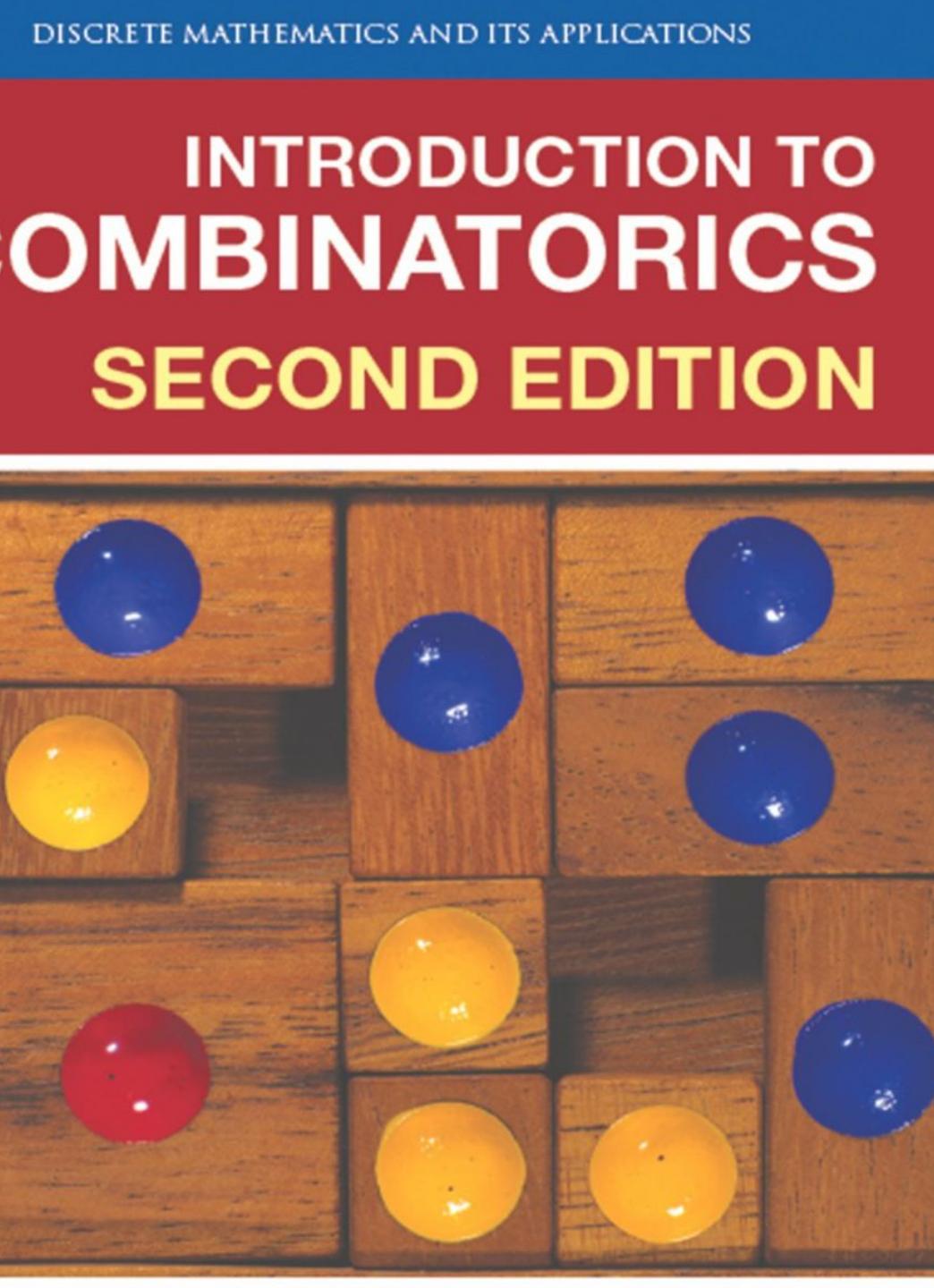
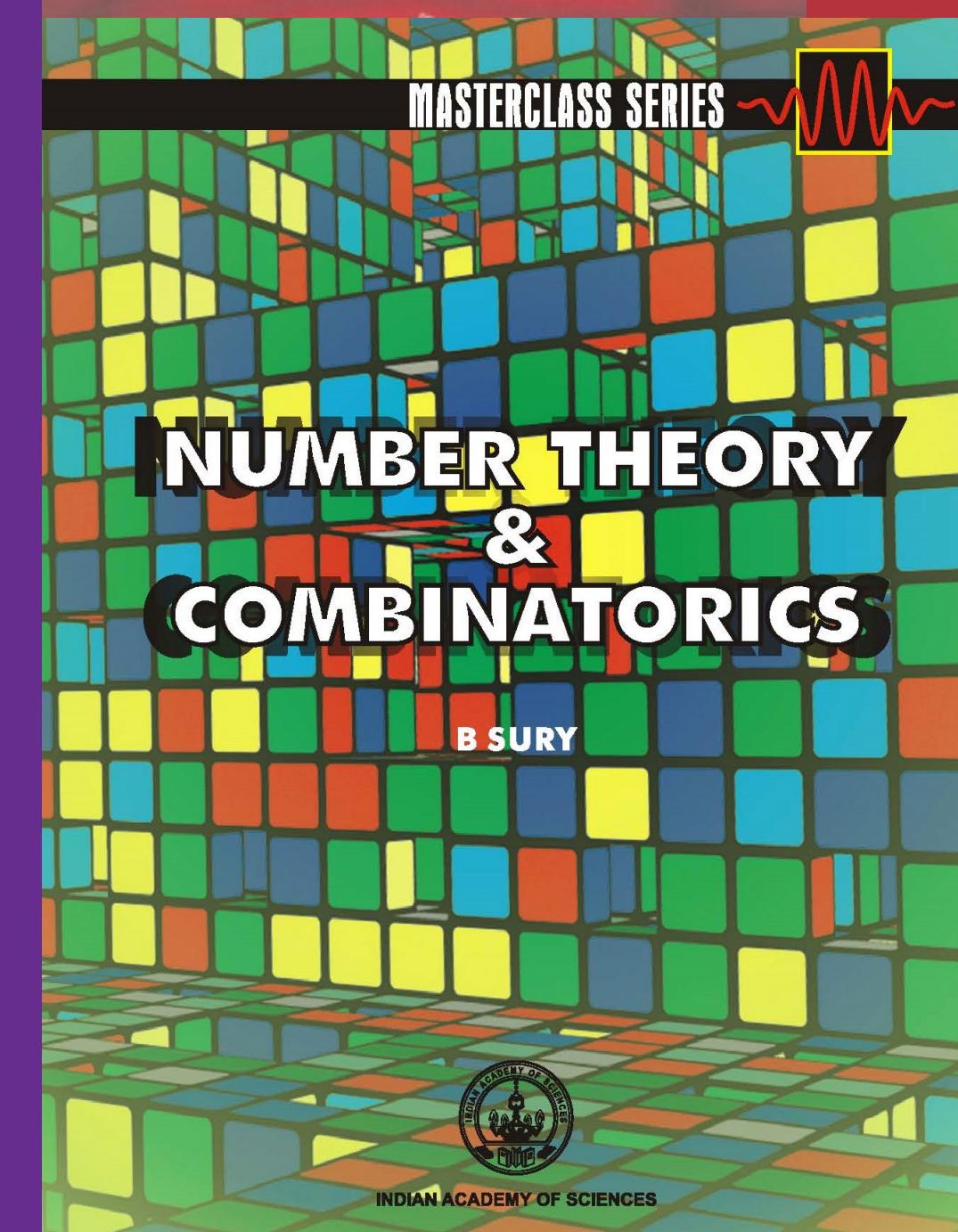
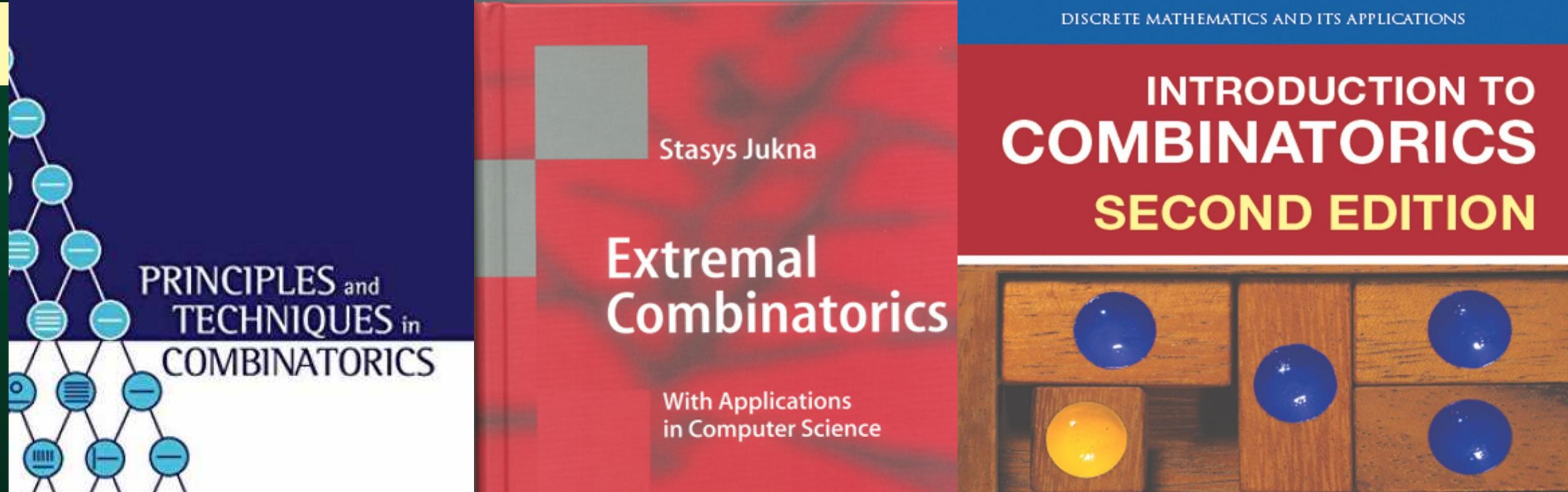


Applied Combinatorics

2017 Edition



Mitchel T. Keller
William T. Trotter



COMBINATORICS AND NUMBER THEORY OF COUNTING SEQUENCES

István Mező



Mitchel T. Keller
William T. Trotter



Stasys Jukna

Extremal Combinatorics

With Applications
in Computer Science

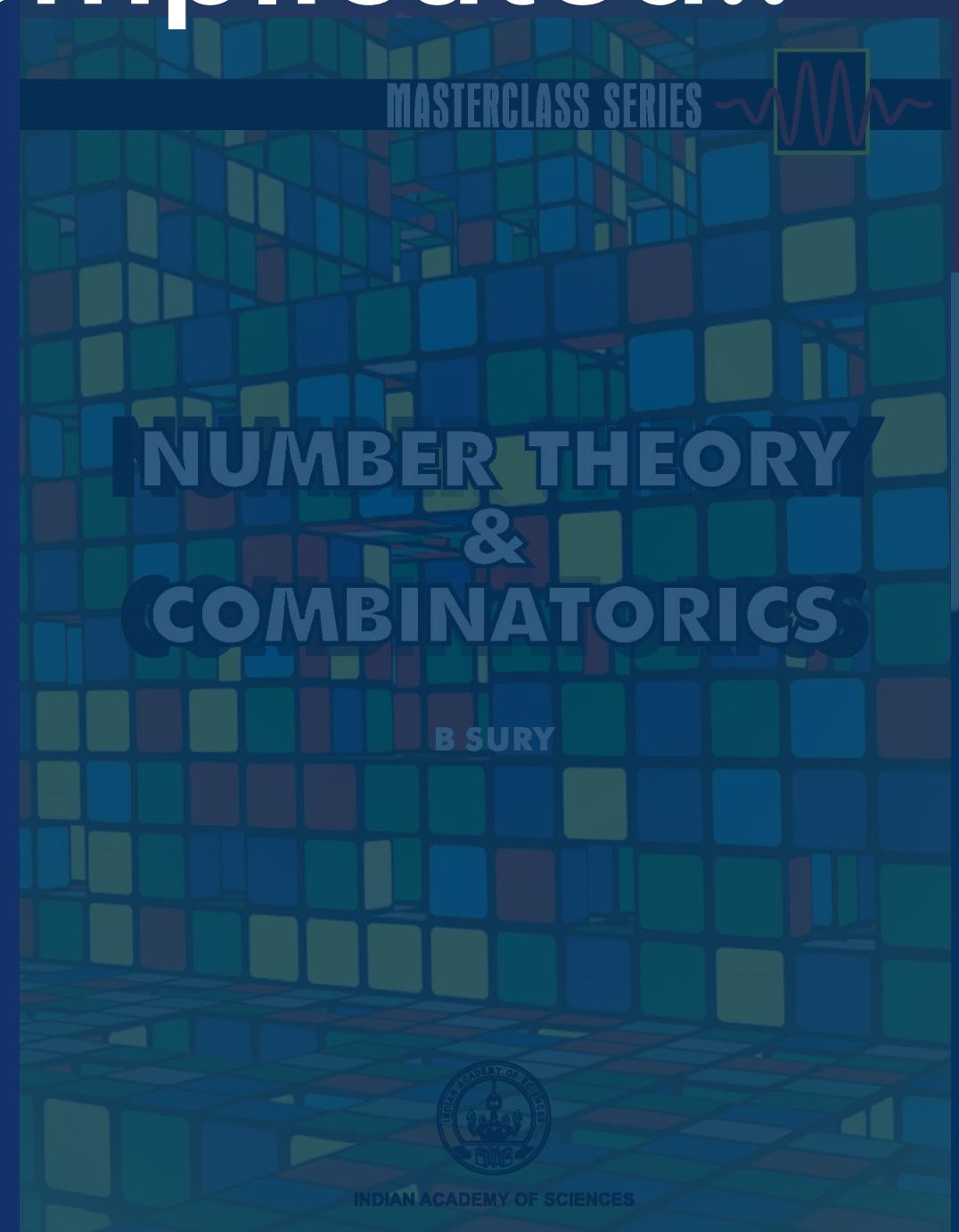
INTRODUCTION TO COMBINATORICS SECOND EDITION



WALTER D. WALLIS AND JOHN C. GEORGE

 CRC Press
Taylor & Francis Group

A CHAPMAN & HALL BOOK



RUSSELL MERRIS

www.

Automation to the rescue



<http://cfbot.cputube.org/>

34/3268	Add tab-complete for full name backslash commands	Haiying Tang	patch	
34/2614	Add table expansion hook	Erik Nordström	patch	
34/3213	Allow providing restore_command as a command line option to pg_rewind	Alexey Kondratov	patch	
34/3168	Avoid stuck of pgbench due to skipped transactions	Yugo Nagata	patch	



Add more commits by pushing to the **bagder/reuse-local_port** branch on curl/curl.

Some checks were not successful

47 successful, 4 failing, 1 cancelled, and 1 neutral checks

Fuzzer / fuzzing (pull_request)	Successful in 51m	Details
Linux / hyper (pull_request)	Successful in 14m	Details

[Hide all checks](#)



- 1. Fork postgres.git as public repo**
- 2. Install CI apps from Github Marketplace**
- 3. Allow apps on forked repository**
- 4. Create runfiles in ...**    **YAML**
- 5. Commit runfiles to a specific branch***

Options

Manage access

Security & analysis

Branches

Webhooks

Notifications

Integrations

Deploy keys

Autolink references

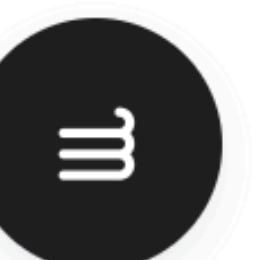
Actions

Installed GitHub Apps

GitHub Apps augment and extend your workflows on GitHub with commercial, open source, and enterprise-grade tools.



AppVeyor



Cirrus CI



LGTM.com

```
$ git pull --rebase
$ git push pgci master:master
$ git checkout -b dg-<patchname>
$ git add -p
$ git commit -m "<patchname>"
$ git cherry-pick <runfiles sha>
$ git push pgci dg-<patchname>:dg-<patchname>
$ gh pr create --head dg-<patchname> \
  --base master --fill
```

dg streamlog conn null check #7

 Open

danielgustafsson wants to merge 2 commits into [master](#) from [dg-streamlog_conn_null_check](#) 

 Conversation 1

 Commits 2

 Checks 6

 Files changed 7



danielgustafsson commented 3 days ago

Owner  ...

- pg_receivewal: remove extra conn = NULL; in StreamLog
- Perform PostgreSQL CI checks



BRupireddy and others added 2 commits 5 days ago



 pg_receivewal: remove extra conn = NULL; in StreamLog

0aee214



 Perform PostgreSQL CI checks 

● 1239043



All checks have passed

8 successful checks

[Hide all checks](#)

✓ FreeBSD 12.2 Successful in 23m — Task Summary [Details](#)

✓ FreeBSD 13.0 Successful in 21m — Task Summary [Details](#)

✓ LGTM analysis: C/C++ Successful in 76m — 8 new alerts and 3 fixed alerts [Details](#)

✓ LGTM analysis: Python Successful in 10m — No new or fixed alerts [Details](#)

✓ Linux Successful in 22m — Task Summary [Details](#)

✓ continuous-integration/appveyor/branch — AppVeyor build succeeded [Details](#)



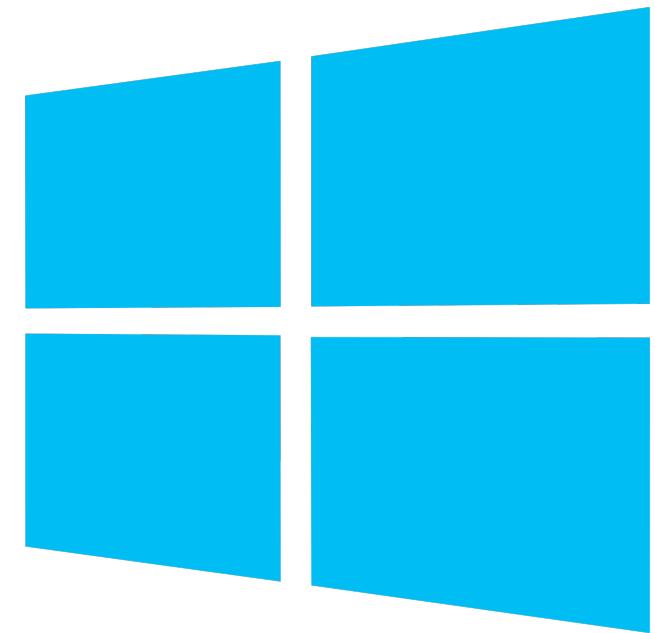
This branch has no conflicts with the base branch

Merging can be performed automatically.

[Merge pull request](#)



You can also [open this in GitHub Desktop](#) or view [command line instructions](#).



```
$ git pull --rebase  
$ git push pgci master:master  
$ git checkout -b dg-<patchname>  
$ git add -p  
$ git commit -m "<patchname>"  
$ git cherry-pick <runfiles sha>  
$ git push pgci dg-<patchname>:dg-<patchname>  
$ gh pr create --head dg-<patchname> \  
--base master --fill
```

REL_X_Y_STABLE

REL_X_Y_STABLE

**Thanks!
Questions?**