

Tools für dein SEP

Continuous Integration

IEEE Student Branch Passau
Julian Breiteneicher

5. Juli 2018

- ▶ Regelmäßiges, automatisches Bauen und Testen des gesamten Projekts
- ▶ Zeitnahe Entdeckung von Fehlern
- ▶ Schnelles Finden des schuldigen Commits
- ▶ Automatische Benachrichtigung (z. B. über E-Mail)
- ▶ Voraussetzung: Existierendes Build-System (z. B. Gradle, Maven, Ant, ...)

Travis CI  About Us Status Help Julian Breitenreicher 

Search all repositories

[My Repositories](#) Running (0/0)

+
✓ [julianbreitenreicher/grad](#) # 12
⌚ Duration: 21 sec
📅 Finished: 16 days ago

✗ [se-passau/vara-llvm](#) # 12
⌚ Duration: 1 min 33 sec
📅 Finished: 6 months ago

✓ [julianbreitenreicher/SEP](#) # 506
⌚ Duration: 2 min 19 sec
📅 Finished: 4 years ago

[julianbreitenreicher / gradle-ci-demo](#)  build passing

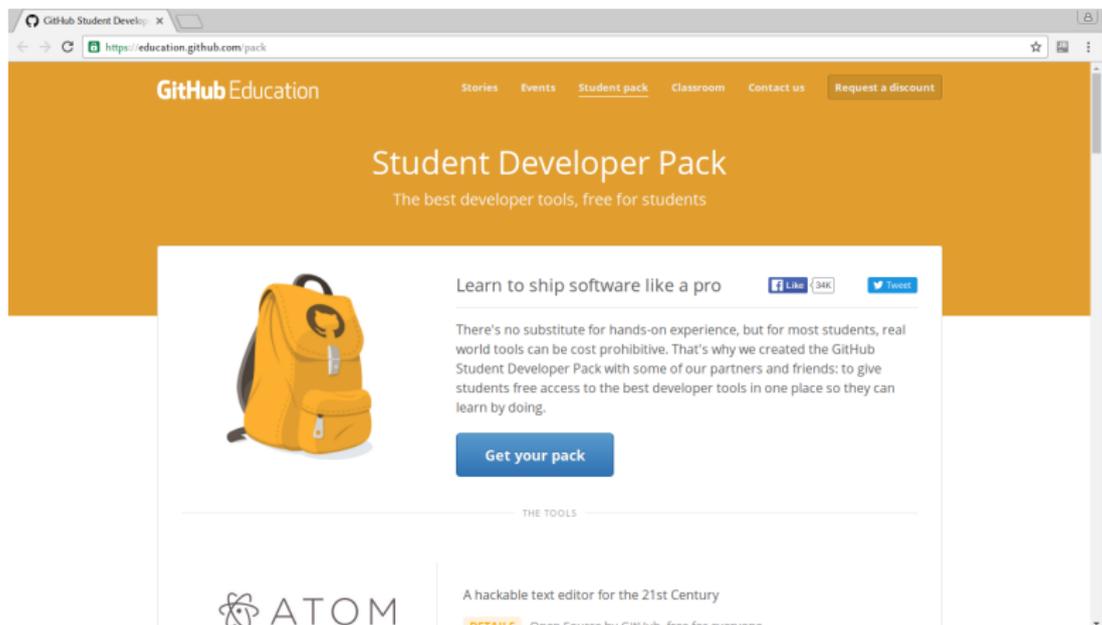
Current Branches [Build History](#) Pull Requests More options 

✓ demo	Fix dog	→ #12 passed	⌚ 21 sec	📅 16 days ago
⌚	Julian Breitenreicher	→ ae566e6		
✗ demo	Change dog	→ #11 failed	⌚ 24 sec	📅 16 days ago
⌚	Julian Breitenreicher	→ 343a123		
✓ demo	Fix bug again	→ #10 passed	⌚ 34 sec	📅 16 days ago
⌚	Julian Breitenreicher	→ 6055c82		
✗ demo	Introduce bug	→ #9 failed	⌚ 42 sec	📅 16 days ago
⌚	Julian Breitenreicher	→ 1642e82		
✓ master	Fix bug	→ #8 passed	⌚ 32 sec	

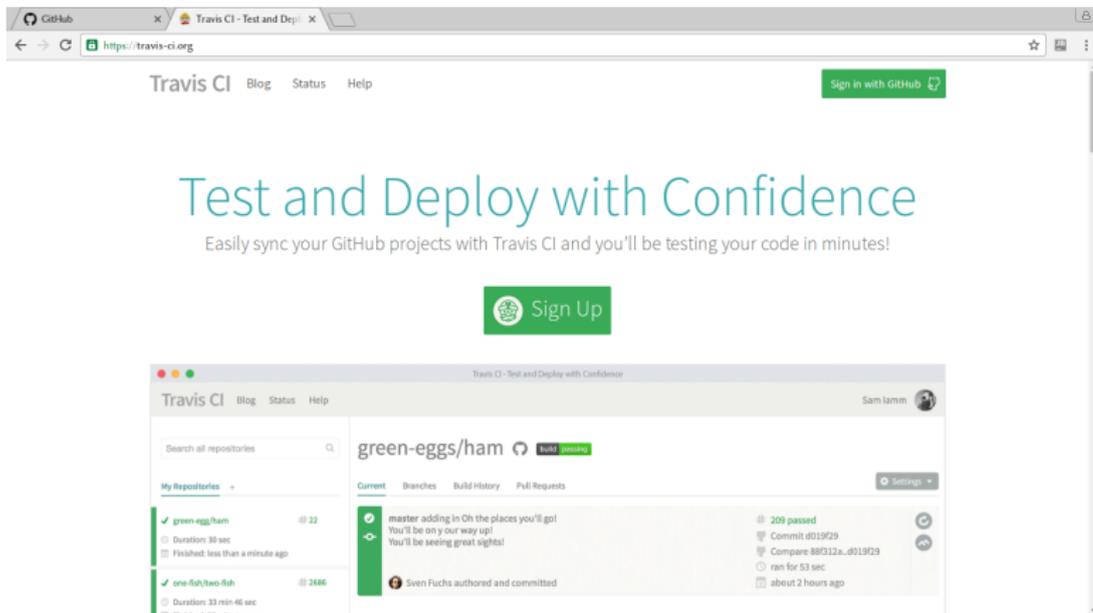
- ▶ Jenkins
- ▶ Travis CI

- ▶ Unterstützt Gradle, Maven, Ant, ...
- ▶ Self-Hosted (Java)
- ▶ Etwas aufwändige Einrichtung, aber sehr mächtig
- ▶ URL: <https://jenkins.io>

- ▶ Sehr gut in Github integriert
- ▶ Einrichtung sehr einfach
- ▶ Unterstützt Gradle, Maven und Ant
- ▶ Gehostet bei <https://travis-ci.org>
- ▶ Als Student kostenlos über Githubs *Student Developer Pack*
<https://education.github.com>

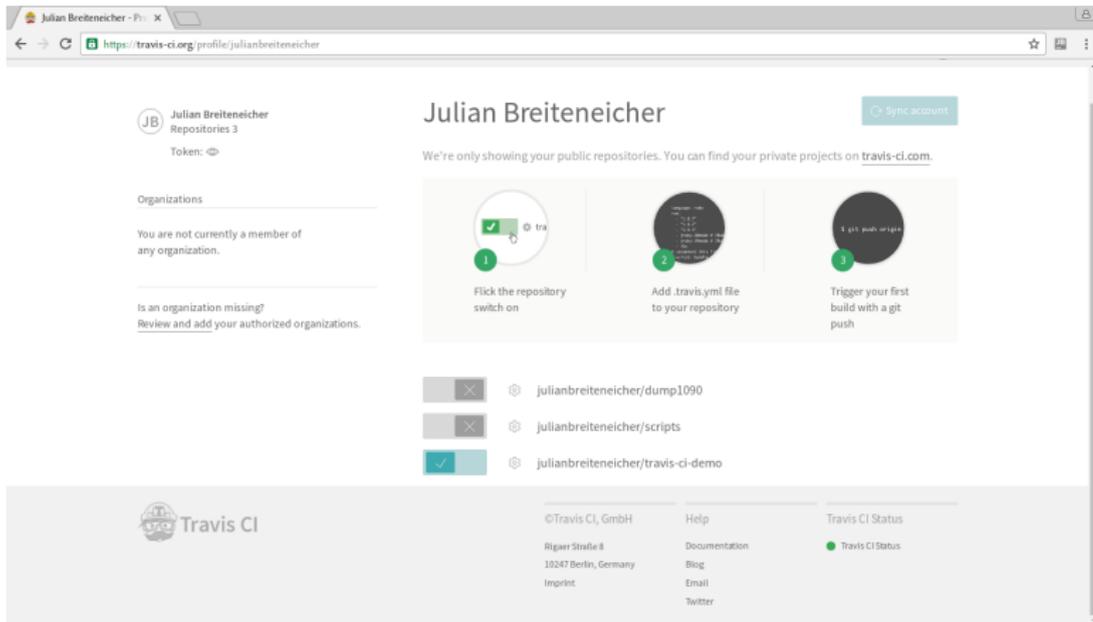


The screenshot shows a web browser window with the URL `https://education.github.com/pack`. The page has a dark orange header with the GitHub Education logo and navigation links: [Stories](#), [Events](#), [Student pack](#) (active), [Classroom](#), [Contact us](#), and [Request a discount](#). The main content area features a large orange banner with the text "Student Developer Pack" and the subtitle "The best developer tools, free for students". Below this is a white card containing an illustration of a yellow backpack with a GitHub logo on it. To the right of the backpack, the text reads "Learn to ship software like a pro" with social media share buttons for Facebook (34K) and Twitter. A paragraph follows: "There's no substitute for hands-on experience, but for most students, real world tools can be cost prohibitive. That's why we created the GitHub Student Developer Pack with some of our partners and friends: to give students free access to the best developer tools in one place so they can learn by doing." Below the text is a blue button labeled "Get your pack". Underneath the main card, there is a section titled "THE TOOLS" with a horizontal line. The first tool listed is "ATOM", featuring the Atom logo and the text "A hackable text editor for the 21st Century". A yellow "DETAILS" button is followed by the text "Open Source by GitHub. free for everyone".



The image shows a browser window displaying the Travis CI website. The top navigation bar includes 'Travis CI', 'Blog', 'Status', and 'Help', along with a 'Sign in with GitHub' button. The main heading reads 'Test and Deploy with Confidence' with the subtext 'Easily sync your GitHub projects with Travis CI and you'll be testing your code in minutes!'. A 'Sign Up' button is prominently displayed.

Below the main content is a screenshot of the Travis CI interface for a repository named 'green-eggs/ham'. The interface shows a search bar, a list of repositories, and a detailed view of the current build. The build status is 'passed' (green circle with checkmark). The commit message is 'master adding in Oh the places you'll go! You'll be on your way up! You'll be seeing great sights!'. The commit author is 'Sven Fuchs' and the commit hash is 'd019f29'. The build duration is '33 min 46 sec' and it was completed 'about 2 hours ago'.



Julian Breitenicher - Profile

https://travis-ci.org/profile/julianbreitenicher

JB Julian Breitenicher
Repositories 3
Token:

Organizations

You are not currently a member of any organization.

Is an organization missing?
[Review and add your authorized organizations.](#)

Julian Breitenicher

[Sync account](#)

We're only showing your public repositories. You can find your private projects on [travis-ci.com](#).



1

Flick the repository switch on



2

Add `.travis.yml` file to your repository



3

Trigger your first build with a git push

-   [juliانبreitenicher/dump1090](#)
-   [juliانبreitenicher/scripts](#)
-   [juliانبreitenicher/travis-ci-demo](#)



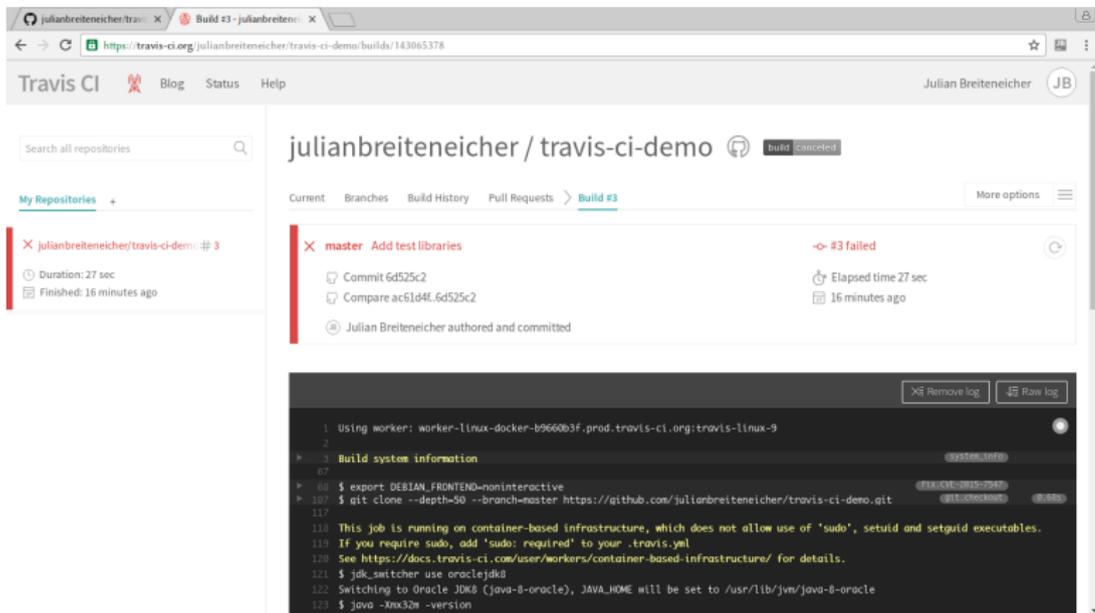
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10247 Berlin, Germany
Imprint

Help

- [Documentation](#)
- [Blog](#)
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Travis CI Status

● [Travis CI Status](#)



The screenshot shows a web browser window displaying a Travis CI build page. The browser address bar shows the URL `https://travis-ci.org/julianbreiteneicher/travis-ci-demo/builds/143065378`. The page header includes the Travis CI logo, navigation links (Blog, Status, Help), and the user name Julian Breiteneicher. The main content area shows the repository `julianbreiteneicher / travis-ci-demo` with a `build canceled` status. The build is identified as `Build #3`. A summary section indicates that the `master` branch build failed, with a commit hash `6d525c2`, a duration of 27 seconds, and a completion time of 16 minutes ago. Below this, a terminal log snippet is visible, showing system information and the start of a `git clone` command.

Travis CI  Blog Status Help Julian Breiteneicher 

Search all repositories

My Repositories +

- ✖ julianbreiteneicher/travis-ci-demo: #3**
 - ⌚ Duration: 27 sec
 - 📅 Finished: 16 minutes ago

julianbreiteneicher / travis-ci-demo  **build canceled**

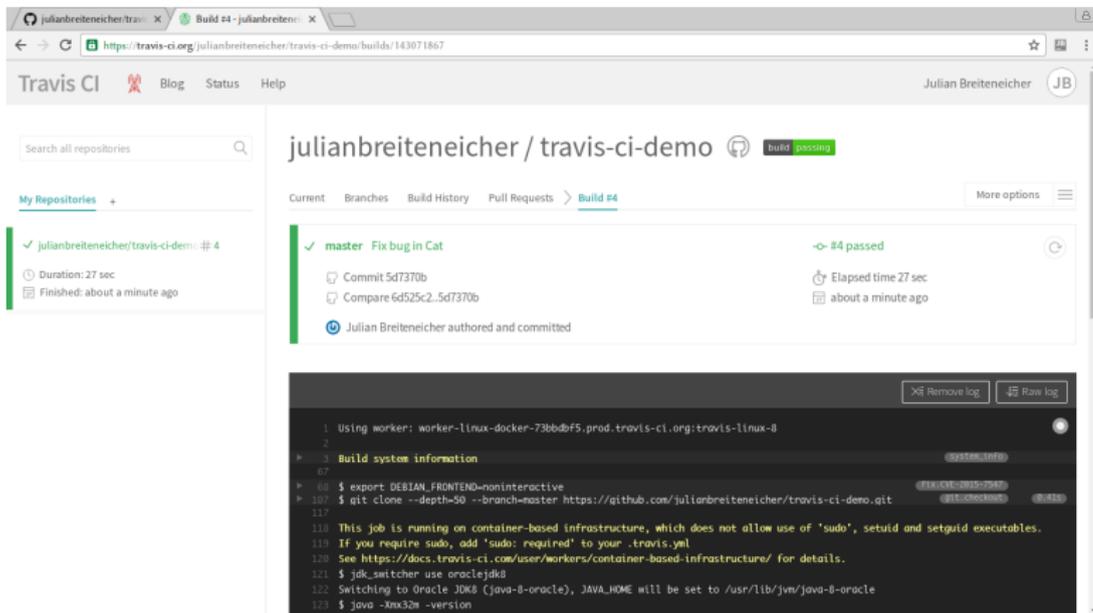
Current Branches Build History Pull Requests **Build #3** More options 

✖ master Add test libraries **✖ #3 failed** 

- 📄 Commit 6d525c2
- 🔍 Compare ac61d4f..6d525c2
- 👤 Julian Breiteneicher authored and committed

🗑 Remove log 📄 Raw log

```
1 Using worker: worker-linux-docker-b9660b3f.prod.travis-ci.org:travis-linux-9
2
3 Build system information (system info)
4
5 $ export DEBIAN_FRONTEND=noninteractive
6 $ git clone --depth=50 --branch=master https://github.com/julianbreiteneicher/travis-ci-demo.git (git clone) (git checkout)
7
8 This job is running on container-based infrastructure, which does not allow use of 'sudo', setuid and setgid executables.
9 If you require sudo, add 'sudo: required' to your .travis.yml
10 See https://docs.travis-ci.com/user/workers/container-based-infrastructure/ for details.
11 $ jdk_switcher use oraclejdk8
12 Switching to Oracle JDK8 (java-8-oracle), JAVA_HOME will be set to /usr/lib/jvm/java-8-oracle
13 $ java -Xmx32m -version
```



The screenshot shows the Travis CI web interface for the repository `julianbreiteneicher/travis-ci-demo`. The build status is **passing**. The build log shows the following steps:

```

1 Using worker: worker-linux-docker-73bbdf5.prod.travis-ci.org:travis-linux-0
2
3 Build system information system info
4
5
6 $ export DEBIAN_FRONTEND=noninteractive
7
8 $ git clone --depth=50 --branch=master https://github.com/julianbreiteneicher/travis-ci-demo.git git clone 0:41s
9
10 This job is running on container-based infrastructure, which does not allow use of 'sudo', setuid and setgid executables.
11 If you require sudo, add 'sudo: required' to your .travis.yml
12 See https://docs.travis-ci.com/user/workers/container-based-infrastructure/ for details.
13 $ jdk_switcher use oraclejdk8
14 Switching to Oracle JDK8 (java-8-oracle), JAVA_HOME will be set to /usr/lib/jvm/java-8-oracle
15 $ java -Xmx32m -version
  
```

- ▶ Kleines Beispielprojekt unter:
`github.com/julianbreiteneicher/gradle-ci-demo`