

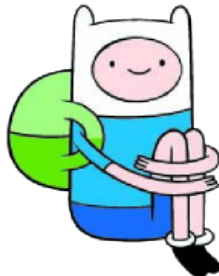
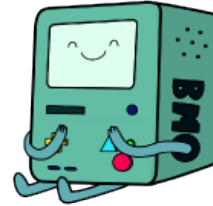
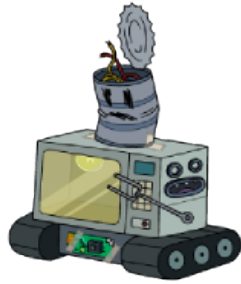
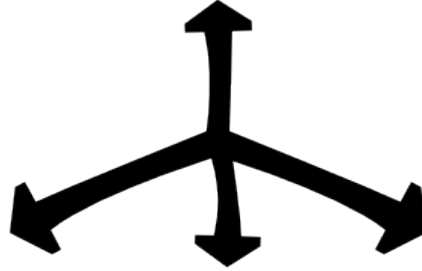
\* abusando de

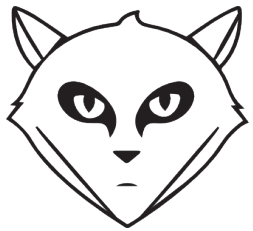
# Mantener sincronizado en **Github** un repositorio de **Gitlab** utilizando\* **Gitlab CI**

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Jorge Suárez de Lis

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UNIVERSIDADE DE SANTIAGO DE COMPOSTELA

[citius.usc.es](http://citius.usc.es)





# GitLab



Está alojado en el CíTIUS.



Permite crear proyectos privados.



Visibilidad baja e imposible colaborar gente externa.



# github

SOCIAL CODING



Está alojado en EEUU.



No permite crear proyectos privados\*.



Buena visibilidad y facilidad para colaboraciones.

\* en realidad sí, pero pagando

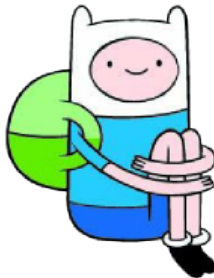
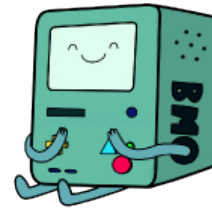
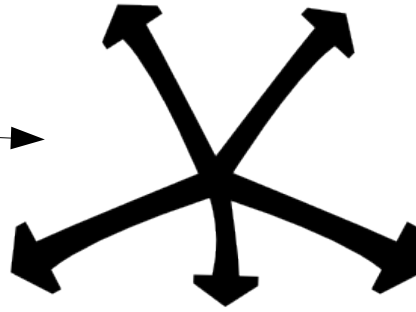
USAR **LOS DOS** A LA VEZ



GitLab



github  
SOCIAL CODING

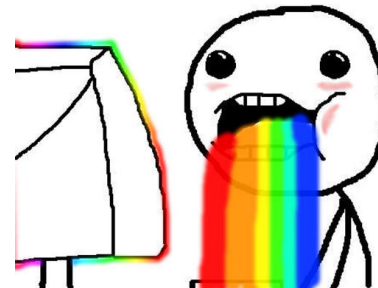
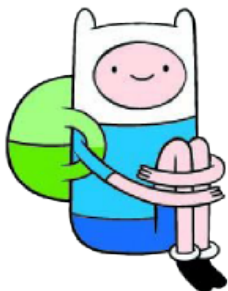
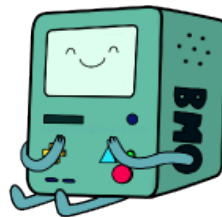
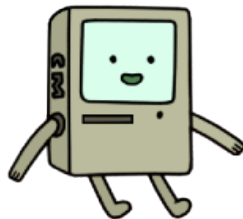
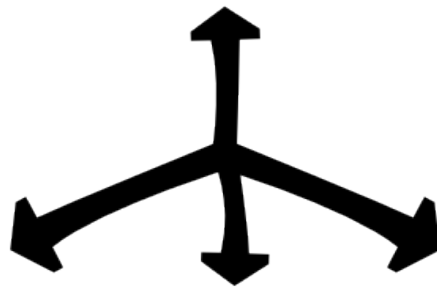




GitLab



github  
SOCIAL CODING



VAMOS ALLÁ  
EN 6 SENCILLOS\* PASOS

\* la sencillez es relativa

# Paso 1: Crear un par de claves

```
Terminal View Search Terminal Help
$ ssh-keygen -t rsa -C "Sincronizacion de Testproject con Github"
Generating public/private rsa key pair.
Enter file in which to save the key (/home/remoto/jorge.suarez/.ssh/id_rsa): key-sincro-github
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in key-sincro-github.
Your public key has been saved in key-sincro-github.pub.
The key fingerprint is:
ac:51:01:83:3e:22:96:5a:eb:28:b7:b0:39:41:26:38 Sincronizacion de Testproject con Github
The key's randomart image is:
+--[ RSA 2048 ]-----+
|      .o..          |
|      . . .         |
| . . . .            |
|E=o o o             |
|*+ o .. S           |
|o . o               |
|. + .               |
|++o                 |
|+o..                |
+-----+
$ ls
key-sincro-github  key-sincro-github.pub
$
```



# Paso 2: Crear proyecto en Github

Create a New Repository - Mozilla Firefox

Create a New Repos... x +

GitHub, Inc. (US) | https://github.com/new

Search GitHub

Explore Gist Blog Help

gentakojlma +

**Owner** / **Repository name**

gentakojlma / testproject\_ ✓

Great repository names are short and memorable. Need inspiration? How about **ballin-ironman**.

**Description** (optional)

☒ **Public**  
Anyone can see this repository. You choose who can commit.

☐ **Private**  
You choose who can see and commit to this repository.

☐ **Initialize this repository with a README**  
This will allow you to `git clone` the repository immediately. Skip this step if you have already run `git init` locally.

Add .gitignore: **None** | Add a license: **None** ⓘ

**Create repository**

# Paso 3: Añadir clave pública a los proyectos

The screenshot shows the GitHub interface in a Mozilla Firefox browser. The address bar displays the URL `https://github.com/gentakojima/testproject/`. The page title is 'Deploy keys - Mozilla Firefox'. The repository name 'gentakojima / testproject' is visible at the top, along with 'Unwatch' and 'Star' buttons. On the left sidebar, the 'Deploy keys' tab is selected. The main content area is titled 'Deploy keys' and contains the message 'There are no deploy keys for this repository'. Below this is a section titled 'Add a deploy key' with a form. The 'Title' field contains 'Gitlab Synchronization'. The 'Key' field contains a long SSH key: `ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCsVYPexAZ2D+DibNHmq65MLfrfZL38aAoKsw/mFMMTE7Z1PbHV20jwB+0+tlqdbvFcswd5MI23KXBJmYml3qpvZzSftyNnnKsoAssx8W4zZDq/ibMWt8ienk13ZhUdhnvZi6vDzqAMIHNA7u9XFOBCFExnruZ4cOILqoXcpwJsF1RRJRRf9qb42jDAXzB+yfQQdygFhAuT1LQgEzC7ulWn+RFR0YSInYrv0fvrYLE5aaUJAldvM2NVdfncEbkQo3gTIh985VJIEqshccbHdT5qxVmkO3nuNCrq3u6Uz7ZsWbTo6kONQOfN/bXgvFsqe4pD3MDC5mVreu74hvVG7yLj Sincronizacion de Testproject con Github`. A green 'Add key' button is at the bottom of the form.

Deploy keys - Mozilla Firefox

Deploy keys

GitHub, Inc. (US) `https://github.com/gentakojima/testproject/` Google

This repository Search Explore Gist Blog Help gentakojima + Unwatch 1 Star 0

gentakojima / testproject

Options Collaborators Webhooks & Services **Deploy keys**

**Deploy keys** Add deploy key

There are no deploy keys for this repository

**Add a deploy key**

Title

Gitlab Synchronization

Key

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQCsVYPexAZ2D+DibNHmq65MLfrfZL38aAoKsw/mFMMTE7Z1Pb
HV20jwB+0+tlqdbvFcswd5MI23KXBJmYml3qpvZzSftyNnnKsoAssx8W4zZDq
/ibMWt8ienk13ZhUdhnvZi6vDzqAMIHNA7u9XFOBCFExnruZ4cOILqoXcpwJsF1RRJRRf9qb42jDAXzB+yfQQdyg
FhAuT1LQgEzC7ulWn+RFR0YSInYrv0fvrYLE5aaUJAldvM2NVdfncEbkQo3gTIh985VJIEqshccbHdT5qxVmkO3n
uNCrq3u6Uz7ZsWbTo6kONQOfN/bXgvFsqe4pD3MDC5mVreu74hvVG7yLj Sincronizacion de Testproject con
Github
```

Add key

# Paso 3: Añadir clave pública a los proyectos

Jorge Suárez de Lis / testproject | GitLab - Mozilla Firefox

Deploy keys x Jorge Suárez de Lis ... x +

https://gitlab.citius.usc.es/jorge.suarez/testproject/dep

Google

ciTius Aplicacións Wiki Bitácoras Gitlab Cloud Mensajería Páxinas Dashboard Logout

Jorge Suárez de Lis / testproject Search in this project

Project Files Commits Network Graphs Issues 0 Merge Requests Wiki Settings

Project

Members

Deploy Keys

Web Hooks

Services

Protected branches

## New Deploy key

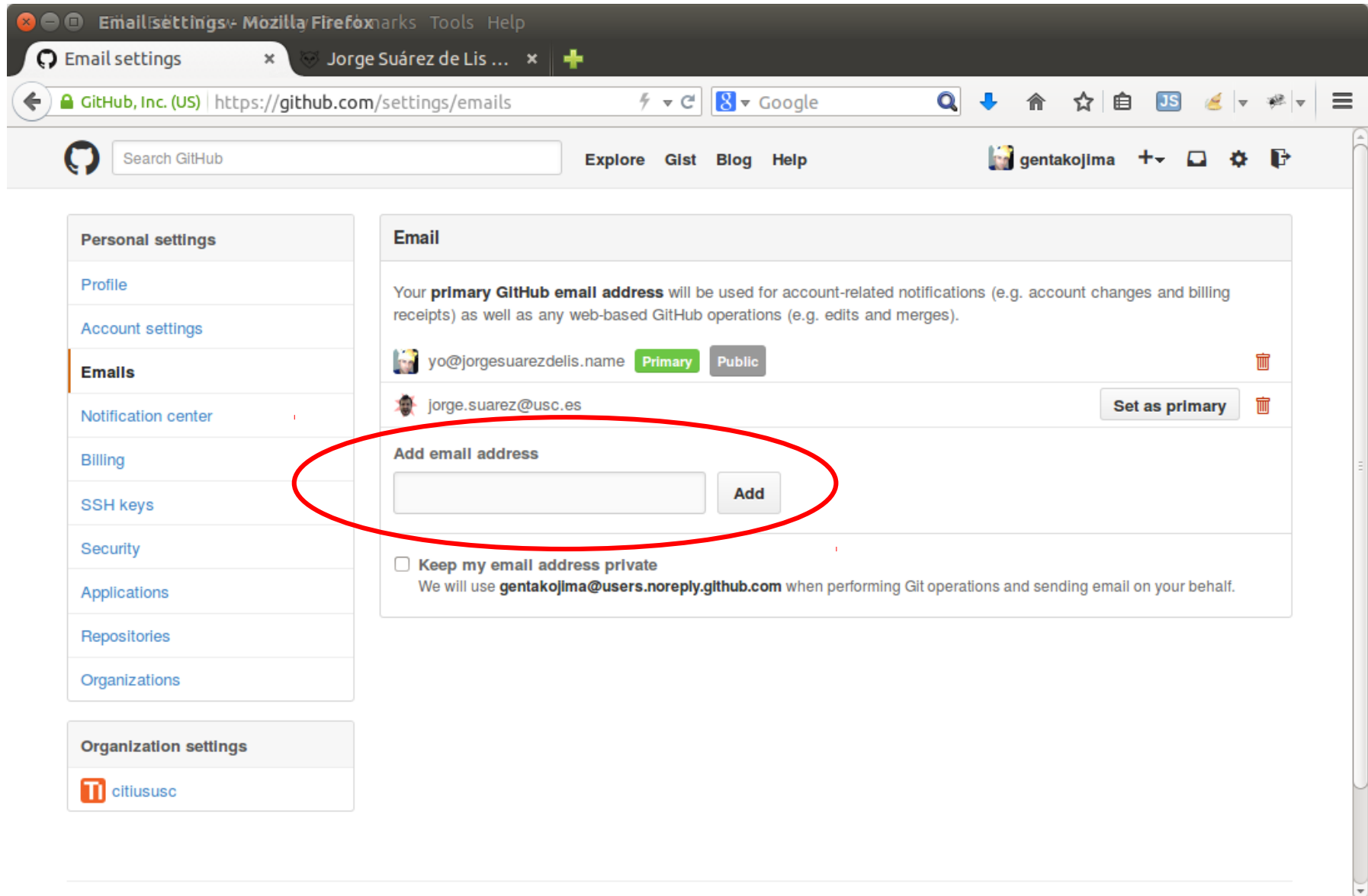
**Title** Github sync

**Key** Paste a machine public key here. Read more about how to generate it [here](#)

```
ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQCsVYPexAZ2D+DibNHmq65MLfrfZL38aAoKsw/mFMMTE
7Z1PbHV20jwB+0+tgldbvFcswd5MI23KXBJmYml3qpvZzSftyNnnKsoAssx8W4zZDq
/ibMWt8ienk13ZhUdnvZi6vDzqAMIHNA7u9XFOBCFExnruZ4cOILqoXcpwJsF1RRJRRf9qb42jDAXzB+yf
QQdygFhAuT1LQgEzC7ulWn+RFR0YSInYrv0fvrYLE5aaUJAldvM2NVdfncEbkQo3gTih985VJIEqshccbH
dT5nxVmkQ3nuNCn3u6I lz77sWhTn6kONQOfN/hXnvFsne4nD3MDC5mVreui74hVVG7vI i
```

Create Cancel

# Paso 4: Añadir cuentas de correo a Github



The screenshot shows the GitHub 'Email settings' page in a Mozilla Firefox browser. The address bar displays 'https://github.com/settings/emails'. The left sidebar contains a 'Personal settings' menu with options like Profile, Account settings, Emails, Notification center, Billing, SSH keys, Security, Applications, Repositories, and Organizations. Below this is an 'Organization settings' section for 'citiususc'. The main content area is titled 'Email' and explains that the primary GitHub email address is used for notifications. It lists two email addresses: 'yo@jorgesuarezdelis.name' (Primary, Public) and 'jorge.suarez@usc.es' (Set as primary). A red circle highlights the 'Add email address' section, which includes a text input field and an 'Add' button. At the bottom, there is a checkbox for 'Keep my email address private' with a note about the default email address used for Git operations.

Personal settings

- Profile
- Account settings
- Emails**
- Notification center
- Billing
- SSH keys
- Security
- Applications
- Repositories
- Organizations

Organization settings

**Email**

Your **primary GitHub email address** will be used for account-related notifications (e.g. account changes and billing receipts) as well as any web-based GitHub operations (e.g. edits and merges).

yo@jorgesuarezdelis.name Primary Public

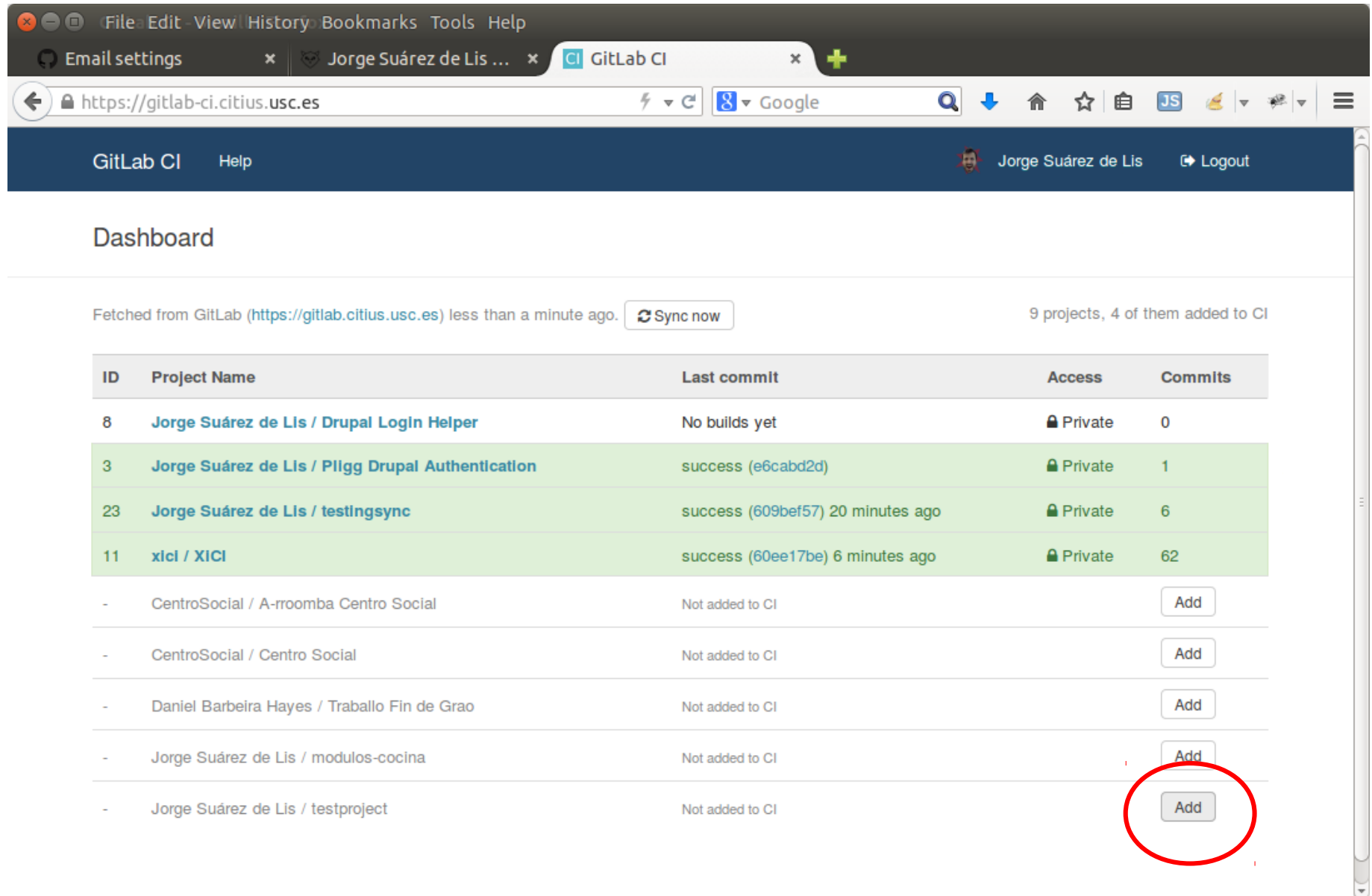
jorge.suarez@usc.es Set as primary

**Add email address**

Add

☐ **Keep my email address private**  
We will use **gentakojlma@users.noreply.github.com** when performing Git operations and sending email on your behalf.

# Paso 5: Añadir el proyecto de Gitlab a Gitlab CI

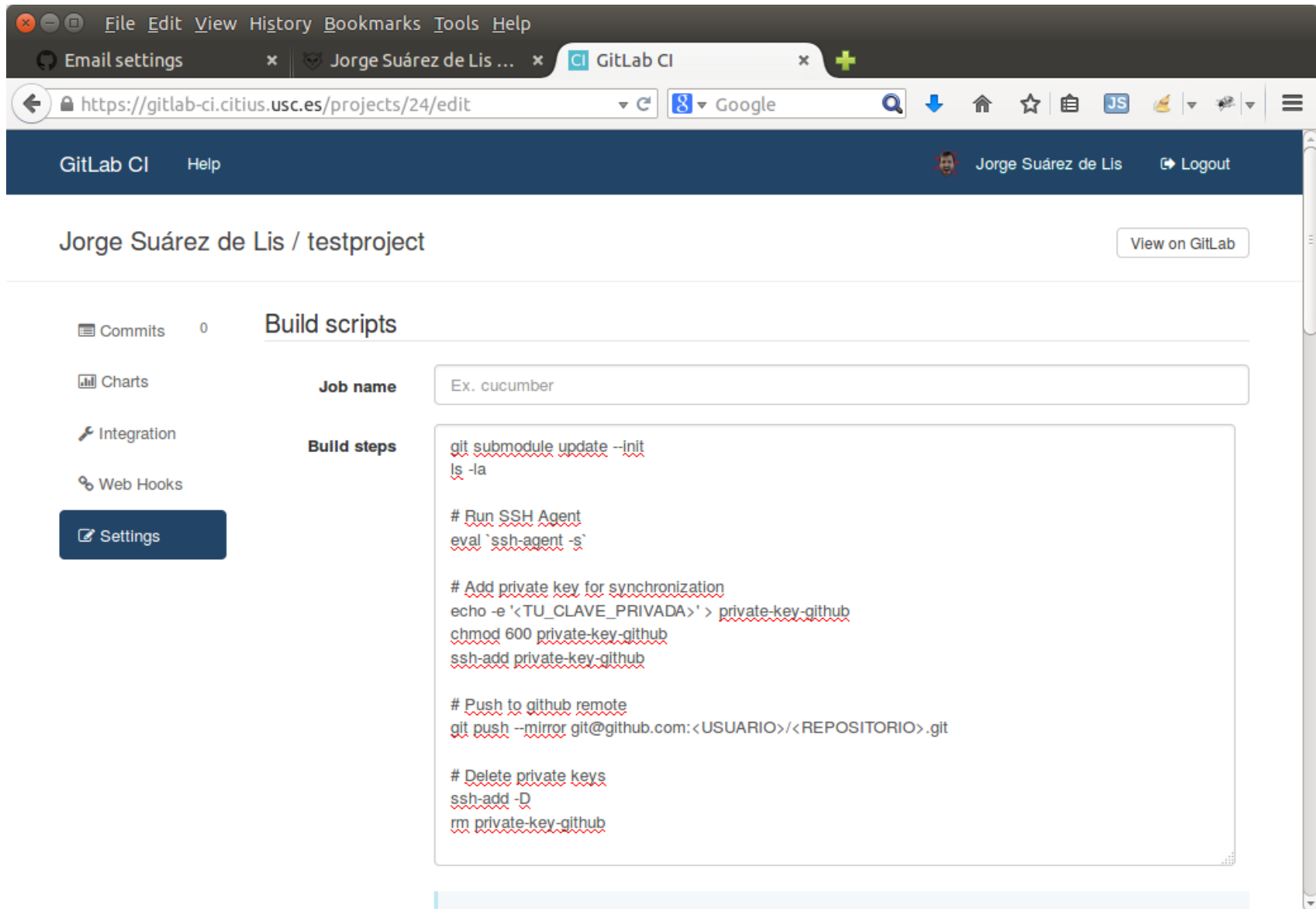


The screenshot shows the GitLab CI Dashboard in a web browser. The browser's address bar displays `https://gitlab-ci.citius.usc.es`. The dashboard header includes the GitLab CI logo, a help link, the user's name 'Jorge Suárez de Lis', and a 'Logout' button. The main content area is titled 'Dashboard' and shows a status message: 'Fetched from GitLab (https://gitlab.citius.usc.es) less than a minute ago.' with a 'Sync now' button. To the right, it says '9 projects, 4 of them added to CI'.

ID	Project Name	Last commit	Access	Commits
8	Jorge Suárez de Lis / Drupal Login Helper	No builds yet	Private	0
3	Jorge Suárez de Lis / Pligg Drupal Authentication	success (e6cabd2d)	Private	1
23	Jorge Suárez de Lis / testingsync	success (609bef57) 20 minutes ago	Private	6
11	xici / XICI	success (60ee17be) 6 minutes ago	Private	62
-	CentroSocial / A-rroomba Centro Social	Not added to CI		<button>Add</button>
-	CentroSocial / Centro Social	Not added to CI		<button>Add</button>
-	Daniel Barbeira Hayes / Trabajo Fin de Grao	Not added to CI		<button>Add</button>
-	Jorge Suárez de Lis / modulos-cocina	Not added to CI		<button>Add</button>
-	Jorge Suárez de Lis / testproject	Not added to CI		<button>Add</button>

The 'Add' button for the 'Jorge Suárez de Lis / testproject' is circled in red.

# Paso 5: Tunear el script de Gitlab CI



The screenshot shows a web browser window with the GitLab CI interface. The browser's address bar displays the URL `https://gitlab-ci.citius.usc.es/projects/24/edit`. The page header includes the GitLab CI logo, a user profile for 'Jorge Suárez de Lis', and a 'Logout' button. The main content area is titled 'Jorge Suárez de Lis / testproject' and features a sidebar with navigation links: 'Commits' (0), 'Charts', 'Integration', 'Web Hooks', and 'Settings' (highlighted with a dark blue button). The 'Build scripts' section is active, showing a 'Job name' field with the placeholder 'Ex. cucumber' and a 'Build steps' text area. The text area contains a script for setting up and pushing to a GitHub repository:

```
git submodule update --init
ls -la

# Run SSH Agent
eval `ssh-agent -s`

# Add private key for synchronization
echo -e '<TU_CLAVE_PRIVADA>' > private-key-github
chmod 600 private-key-github
ssh-add private-key-github

# Push to github remote
git push --mirror git@github.com:<USUARIO>/<REPOSITORIO>.git

# Delete private keys
ssh-add -D
rm private-key-github
```

# Paso 5: Tunear el script de Gitlab CI

# Run SSH Agent

```
eval `ssh-agent -s`
```

# Add private key for synchronization

```
echo -e '<PRIVATE_KEY_WITHOUT_ENDLINES>' > private-key-github
```

```
chmod 600 private-key-github
```

```
ssh-add private-key-github
```

# Go to temporary directory

```
PROJECTDIR="$PWD"
```

```
TEMPDIR=`mktemp -d`
```

```
cd $TEMPDIR
```

# Clone repository and push mirror into Github

```
git clone git@gitlab.citius.usc.es:<USUARIO_GITLAB>/<REPOSITORIO_GITLAB>.git
```

```
cd <REPOSITORIO_GITLAB>
```

```
git push --mirror git@github.com:<USUARIO_GITHUB>/<REPOSITORIO_GITHUB>.git
```

# Cleanup

```
ssh-add -D
```

```
cd "$PROJECTDIR"
```

```
rm -rf $TEMPDIR
```

```
rm -f private-key-github
```

## Paso 6: Hora de la fiesta!!

