How to Create and Add SSH Key to GitHub

This quick visual guide shows how to generate, add, and test your SSH key with GitHub so you can push/pull code securely without entering your credentials every time.

Step 1: Open Git Bash

On Windows: open Git Bash (installed with Git). On macOS/Linux: open Terminal.

Step 2: Check existing SSH keys

Run:
ls -al ~/.ssh
If you see files like id_rsa.pub or id_ed25519.pub, you already have a key.

Step 3: Generate new SSH key

Run:
ssh-keygen -t ed25519 -C 'your_email@example.com'
Press Enter to accept default location, optionally enter a passphrase.

Step 4: Add SSH key to agent

Start agent:
eval '$(ssh-agent -s)'
Add key:
ssh-add ~/.ssh/id_ed25519

Step 5: Copy your public key

Windows: **clip < ~/.ssh/id_ed25519.pub**
macOS: **pbcopy < ~/.ssh/id_ed25519.pub**
Linux: **cat ~/.ssh/id_ed25519.pub**

Step 6: Add key to GitHub

Go to GitHub → Profile → Settings → SSH and GPG Keys → New SSH Key → Paste your key → Add SSH Key.

Step 7: Test connection

Run: **ssh -T git@github.com**
Expected: *Hi username! You've successfully authenticated...*

Step 8: Clone using SSH

Use SSH URL:
git clone git@github.com:username/repository.git

Quick Summary Table

Step	Command/Action	Purpose
1	ls -al ~/.ssh	Check for existing keys
2	ssh-keygen -t ed25519 -C 'email'	Generate a new SSH key
3	eval '$(ssh-agent -s)'	Start SSH agent
4	ssh-add ~/.ssh/id_ed25519	Add key to agent
5	clip < ~/.ssh/id_ed25519.pub	Copy key to clipboard
6	Add key in GitHub Settings → SSH and GPG keys	Register your SSH key
7	ssh -T git@github.com	Test SSH connection
8	git clone git@github.com:user/repo.git	Clone repo using SSH