

An aerial night photograph of a city harbor, likely Oslo, Norway. The city's lights are reflected in the dark water of the harbor. A large, multi-masted sailing ship is docked on the right side. The city buildings are illuminated, and the overall scene is a vibrant display of urban lights at night.

# Bioinformatics session

A two day workshop for bioinformaticians and molecular biologists with focus on the TSO500 pipeline in InPreD

# Overview

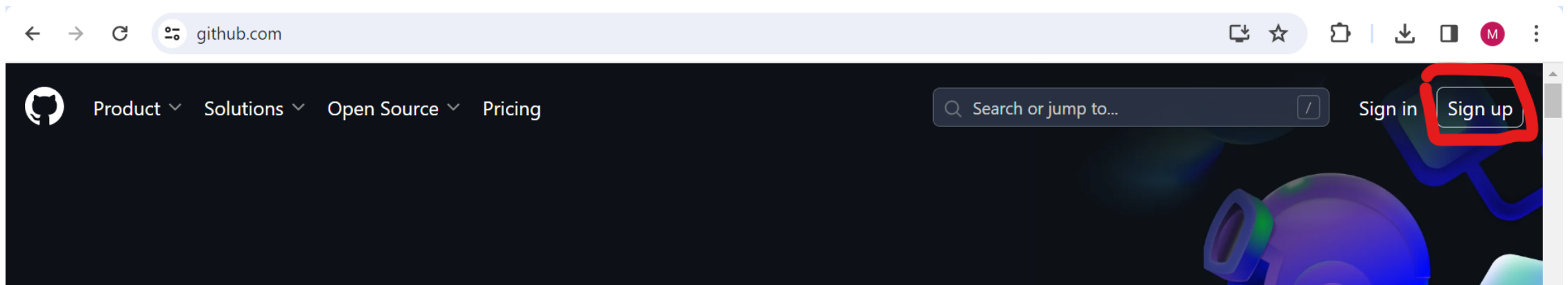
1. Setup
2. Development & Collaboration
3. Nextflow
4. tso500\_nxf\_workflow
5. Python

# 1. Setup



# Create a GitHub account

- go to <https://github.com/> and click on `Sign up`



# Create a GitHub account

- enter your email

Welcome to GitHub!

Let's begin the adventure

**Enter your email\***

→ coder@inpred.no

Continue

# Create a GitHub account

- set a password

Welcome to GitHub!

Let's begin the adventure

Enter your email\*

✓ coder@inpred.no

Create a password\*

→ ••••••••



Continue

# Create a GitHub account

- choose a username

Welcome to GitHub!

Let's begin the adventure

**Enter your email\***

✓ coder@inpred.no

**Create a password\***

✓ ••••••••••

**Enter a username\***

→ inpredder

Continue

# Create a GitHub account

- choose email preferences

## Email preferences

☐ Receive occasional product updates and announcements.

Continue



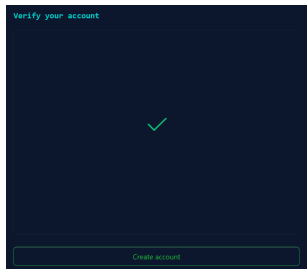
# Create a GitHub account

- solve the puzzle



# Create a GitHub account

- create your account



# Create a GitHub account

- find the activation code in the email you received



Here's your GitHub launch code, @inpredder!



Continue signing up for GitHub by entering the code below:

40619601

Open GitHub

☐ 10-20

☐ 20-50

☐ 50+

Are you a student or teacher?

☒ N/A

☐ Student

☐ Teacher

**Continue**

## What specific features are you interested in using?

Select all that apply so we can point you to the right GitHub plan.



Collaborative coding

Codespaces, Pull requests, Notifications, Code review, Code review assignments, Code owners, Draft pull requests, Project templates, and more.

## Free

- > Unlimited public/private repositories
- > 2,000 CI/CD minutes/month  
*Free for public repositories*
- > 500MB of Packages storage  
*Free for public repositories*
- > 120 core-hours of Codespaces compute
- > 15GB of Codespaces storage
- > Community support

# **1. Setup**

**Be added to InPreD organisation at GitHub**



# 1. Resources

- [Getting started with your GitHub account](#)

## 2. Development & Collaboration

- short git introduction (basic git commands, optional)
- branching system (gitflow workflow)
- github actions (linting, testing, building)
- pull requests (best practice)
- release and semantic versioning
- licensing

### 3. Nextflow

- general (install, best practice)
- nf-core template
- stubbing

## 4. `tso500_nxf_workflow`

- status
- demonstration

## 5. Python

- general (best practice, cli)
- unit testing (pytest)

## Resources

- [Gitflow](#)
- [github actions](#)
- [nf-core](#)
- [pytest unittesting](#)
- [semantic versioning](#)