

Introduction to Github

Prepared by Aliev Mishan

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What is Github?

Github is a platform for hosting code and collaborating on projects.

Keywords:

- Code storage
- Version control
- Collaboration
- Portfolio



Mishan Aliev
thecrazymage

Edit profile

BayesGroup
Moscow, Russia
mishan.aliev@yandex.ru

Achievements



Find a repository... Type Language Sort New

sds_textures Private Star

Forked from struminsky/sds_textures

Jupyter Notebook Updated on Jul 10

Blender-Donut-Tutorial Public Star

Beginner Blender 4.0 Tutorial

blender donut 3d

1 Updated on Mar 24

Network-Science-Project Public Star

Social network analysis project

graphs jupyter-notebook networkx network-analysis vk-api

Jupyter Notebook Updated on Mar 24

TS-2023 Private Star

Jupyter Notebook Updated on Dec 30, 2023

Github homepage example

Why use Github?

- **Version Control:** Github allows you to track changes in your code and revert to previous versions.
- **Collaboration:** Github makes it easier to work on projects with a team.
- **Portfolio:** Github can serve as your online portfolio to showcase your projects.
- **Learning:** Github allows you to learn from other developers' code and contribute to open-source projects.

The screenshot displays the Github repository page for 'Livan-pro'. The repository is in the 'main' branch, has 59 branches, and 1 tag. It shows a list of files and folders with their commit history. The right sidebar contains repository statistics and information.

File/Folder	Commit Message	Commit Date
.github/workflows	Add CI for pre-commit	last year
configs	Support HiFA (#381)	9 months ago
custom	add custom folder (#348)	10 months ago
docker	Lock setuptools version (#472)	last month
docs	Revert "Enable git-lfs and add 256_tets.npz" (#229)	last year
extern	randn tensors moved out of utils to enable lazy imports in ...	last year
load	[DRAFT] Adds stable-zero123 guidance (#356)	9 months ago
scripts	Unified guidance (#276)	last year
threestudio	Add setup file (#407)	8 months ago
.editorconfig	Unified guidance (#276)	last year
.gitignore	ray direction normalize (#351)	10 months ago
.pre-commit-config.yaml	Support proposal network sampling in nerf renderer (#217)	last year
.pylintrc	dreamfusion implementation	last year
2dplayground.ipynb	Removed some dead code in 2dplayground	last year
CHANGELOG.md	Update CHANGELOG.md	last year
DOCUMENTATION.md	Support HiFA (#381)	9 months ago
LICENSE	Create LICENSE	last year
README.md	Update README.md	6 months ago
gradio_app.py	update gradio app	9 months ago

About
A unified framework for 3D content generation.

Readme
Apache-2.0 license
Activity
Custom properties
6.1k stars
80 watching
468 forks
Report repository

Releases 1
v0.1.0 (Latest)
on May 11, 2023

Packages
No packages published

Contributors 30
+ 16 contributors

Languages
Python 97.1%
Jupyter Notebook 2.1%
Other 0.8%

Github repository example

Key Concepts

- **Repository:** a folder for your project that contains all the code, files, and history of changes.

59 Branches
1 Tags

Livan-pro
Lock setuptools version (#472)
✓

a80b37a · last month
489 Commits

	.github/workflows	Add CI for pre-commit	last year
	configs	Support HiFA (#381)	9 months ago
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Github repository example

Link: <https://github.com/threestudio-project/threestudio>

Key Concepts

- **Repository:** a folder for your project that contains all the code, files, and history of changes.
- **Commit:** a snapshot of your project at a specific point in time.

Commit

✓ fix hifa batch bug (#400)

Browse files

main (#400)

DSaurus committed on Jan 5 Verified

1 parent d85e1f8 commit 3dc4f1f

Showing 3 changed files with 7 additions and 7 deletions.

Filter changed files

threestudio/models/guidance

stable_diffusion_guidance...

stable_diffusion_unified_g...

stable_diffusion_vsd_guid...

4

threestudio/models/guidance/stable_diffusion_guidance.py

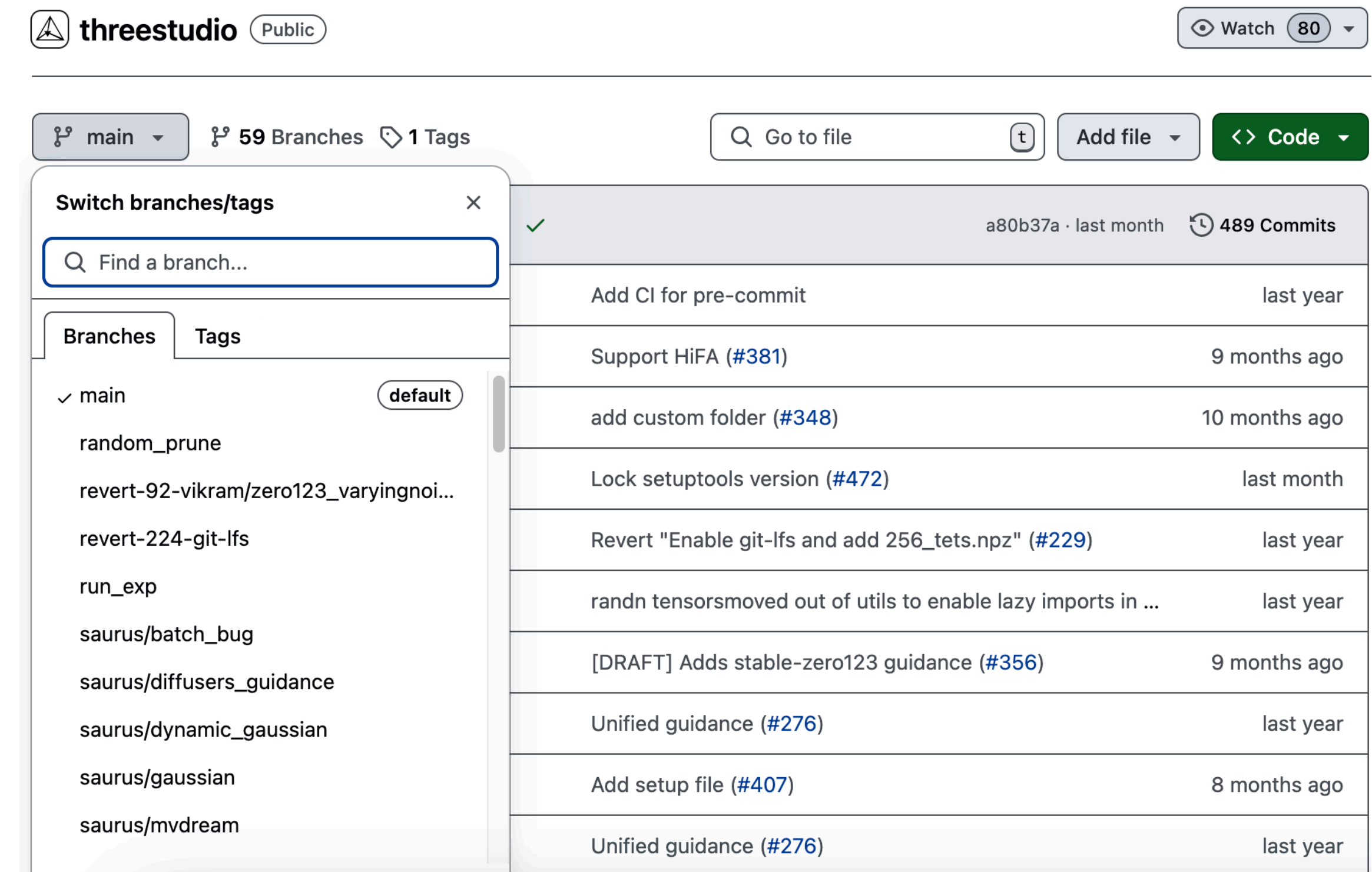
@@ -264,8 +264,8 @@ def compute_grad_sds(
264 f"Unknown weighting strategy:
 {self.cfg.weighting_strategy}"
265)
266
267 - alpha = self.alphas[t] ** 0.5
268 - sigma = (1 - self.alphas[t]) ** 0.5

269 latents_denoised = (latents_noisy - sigma *
 noise_pred) / alpha
270 image_denoised =
 self.decode_latents(latents_denoised)
271
264 f"Unknown weighting strategy:
 {self.cfg.weighting_strategy}"
265)
266
267 + alpha = (self.alphas[t] ** 0.5).view(-1, 1, 1, 1)
268 + sigma = ((1 - self.alphas[t]) ** 0.5).view(-1, 1, 1,
 1)

269 latents_denoised = (latents_noisy - sigma *
 noise_pred) / alpha
270 image_denoised =
 self.decode_latents(latents_denoised)
271

Key Concepts

- **Repository:** a folder for your project that contains all the code, files, and history of changes.
- **Commit:** a snapshot of your project at a specific point in time.
- **Branch:** a parallel version of your project, allowing you to work on different parts simultaneously.



Branch example

Key Concepts














- **Repository:** a folder for your project that contains all the code, files, and history of changes.
- **Commit:** a snapshot of your project at a specific point in time.
- **Branch:** a parallel version of your project, allowing you to work on different parts simultaneously.
- **Pull Request:** a request to merge changes into someone else's repository.

Filters ▾	Q is:pr is:open	Labels 9	Milestones 0	New pull request
12 Open ✓ 148 Closed				
Author ▾ Label ▾ Projects ▾ Milestones ▾ Reviews ▾ Assignee ▾ Sort ▾				
🔗 Effstabledreamfusion 7				
#492 opened on Jul 26 by jadevaibhav • Approved				
🔗 avoid saving whole tensor with .clone() 3				
#457 opened on Apr 4 by kamwoh • Review required				
🔗 Add more loss to Magic123 & fix typos 1				
#412 opened on Jan 12 by Royalvice • Review required				
🔗 Update stable_diffusion_guidance.py 4				
#399 opened on Jan 5 by zimingzhong • Review required				
🔗 support loading stable zero123 in diffuser (fp16 support) ✖				
#395 opened on Jan 2 by Adamdad • Approved				
🔗 Controlnet vsd ✓				
#279 opened on Aug 16, 2023 by yankeesong • Review required				
🔗 Make ImplicitVolume updateable ✓				
#228 opened on Jul 12, 2023 by claforte • Changes requested				












Pull request example

Project Structure: Why is it Important?

- A well-organized project is easier to understand, navigate, and contribute to.
- It helps you and others find what they need quickly.
- It promotes consistency and best practices in your development workflow.

 .github/workflows	Add CI for pre-commit	last year
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Good organized project

 vids	Python opencv trials	6 years ago
 .gitignore	Mathematica notebooks	6 years ago
 LICENSE	Initial commit	6 years ago
 README.md	Create README.md	6 years ago
 SLAM_1_of_2.nb	Mathematica notebooks	6 years ago
 SLAM_1_of_2.pdf	Mathematica notebooks	6 years ago
 SLAM_2_of_2.nb	Mathematica notebooks	6 years ago
 SLAM_2_of_2.pdf	Mathematica notebooks	6 years ago
 basic.py	Python opencv trials	6 years ago
 basic_optical_flow.py	Python opencv trials	6 years ago
 dense_optical_flow.py	Python opencv trials	6 years ago

Bad organized project

Project Structure: Key Elements

- **README.md:** The "face" of your project. Provides an overview, instructions, and information about the project.
- **Code Folders (e.g., src, lib, utils):** Organize your source code into logical folders based on functionality or modules.
- **Data Folders (e.g., data, datasets, raw_data):** Store your datasets, input files, and other project-related data separately.
- **Documentation Folder (e.g., docs):** Place detailed documentation, tutorials, or API references here.
- **Tests Folder (e.g., tests):** Store unit tests, integration tests, and other testing scripts.
- **Licenses:** Define how others can use your code (e.g., MIT License: Permissive license allowing free use, modification, and distribution).

README.md: Essential Information

A good README.md file makes your project accessible and understandable.

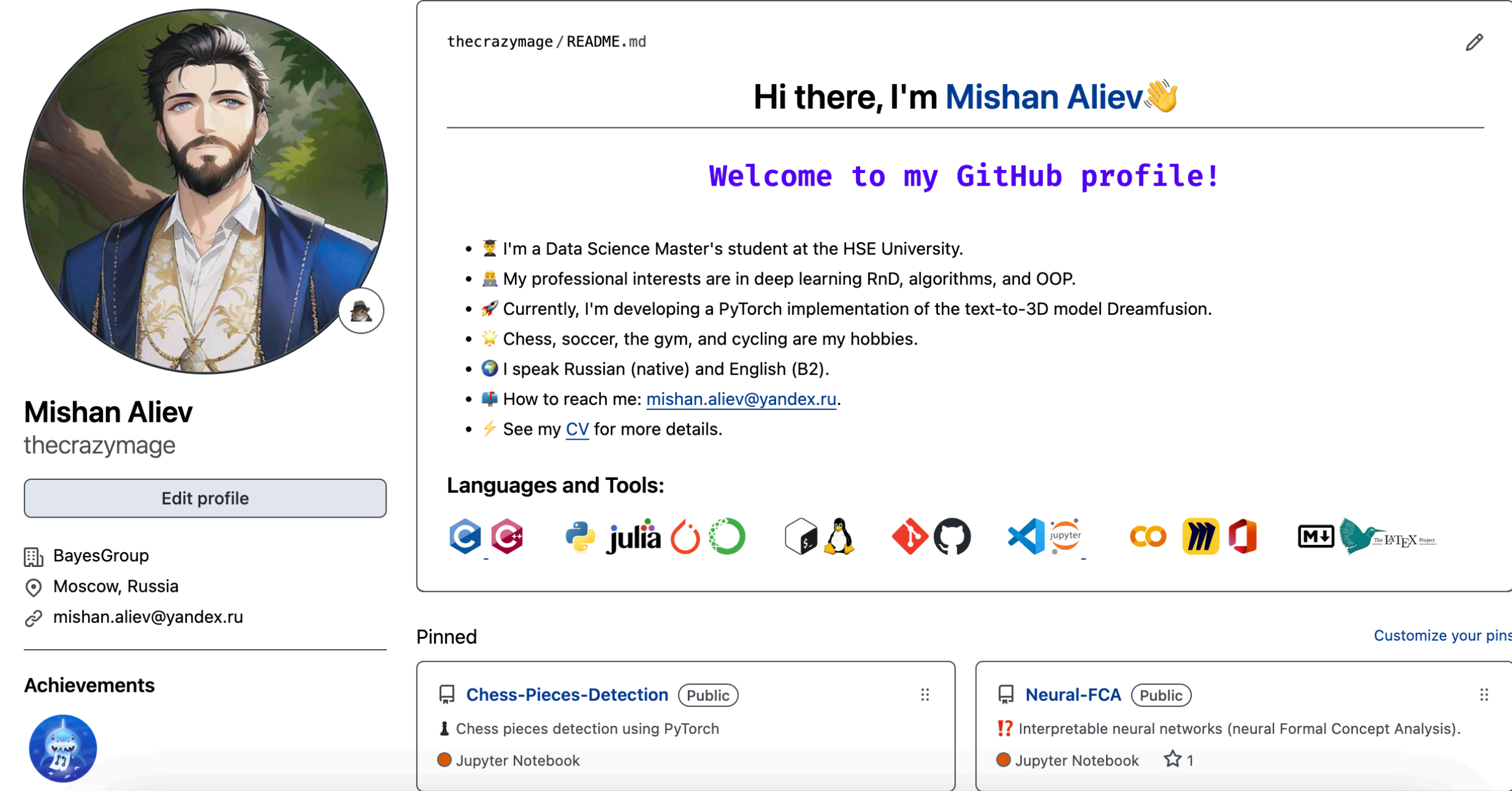
- Essential Sections:
 - **Project Title and Description:** Clearly state what your project is about.
 - **Installation Instructions:** Guide users on how to set up and run your project.
 - **Usage Examples:** Show how to use your code with clear examples.
 - **Dependencies:** List any external libraries or packages required.
 - **Contributing Guidelines:** Explain how others can contribute to your project.
 - **License:** Specify the license under which your project is distributed (e.g., MIT License).
 - ...

Your Github Profile

Your Github profile is the first thing people see when they visit your page.

Tips:

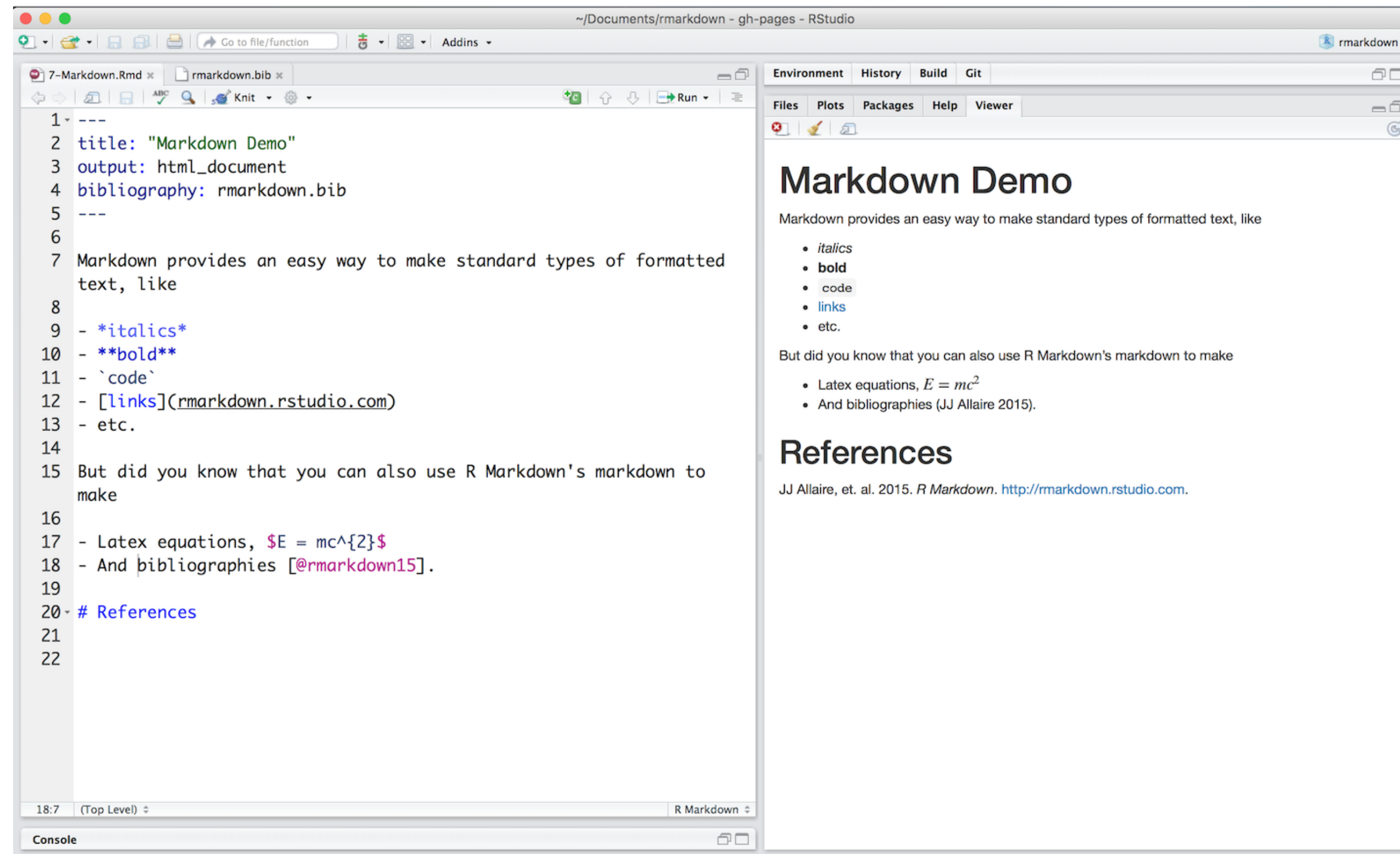
- Create a README.md file.
- Add information about yourself.
- Add information about your interests.
- Add information on how to contact you.
- Use Markdown to format your text.
- Include links to your projects.



Good organized Github profile

Markdown

- Markdown is a simple language for formatting text.
- Markdown Cheat Sheet: <https://www.markdownguide.org/cheat-sheet/>



Markdown text example

Homework

- **Task:** Set up your Github profile
- **Sources:**
 - <https://docs.github.com/en/get-started/start-your-journey/setting-up-your-profile>
 - <https://habr.com/ru/articles/649363/>
 - <https://blog.skillfactory.ru/kak-pravilno-organizirovat-profil-github-novichku/>
 - <https://habr.com/ru/articles/813399/>
- **Git:**
 - https://www.youtube.com/watch?v=zZBiln_2FhM
 - <https://www.youtube.com/watch?v=RG0j5yH7evk>
 - <https://www.youtube.com/watch?v=F2DBSH2VoHQ>

Q&A

Thank you for your attention!