# Scikit-learn governance and decision-making

The purpose of this document is to formalize the governance process used by the scikit-learn project, to clarify how decisions are made and how the various elements of our community interact. This document establishes a decision-making structure that takes into account feedback from all members of the community and strives to find consensus, while avoiding any deadlocks.

This is a meritocratic, consensus-based community project. Anyone with an interest in the project can join the community, contribute to the project design and participate in the decision making process. This document describes how that participation takes place and how to set about earning merit within the project community.

## **Roles And Responsibilities**

#### **Contributors**

Contributors are community members who contribute in concrete ways to the project. Anyone can become a contributor, and contributions can take many forms – not only code – as detailed in the <a href="ref">ref</a> contributors guide <a href="contributors">contributors</a> guide <a href="contributor

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 26); backlink

Unknown interpreted text role 'ref'.

### **Contributor Experience Team**

The contributor experience team is composed of community members who have permission on github to label and close issues. ref. Their work <br/>
bug triaging is crucial to improve the communication in the project and limit the crowding of the issue tracker.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 33); backlink

Unknown interpreted text role "ref".

Similarly to what has been decided in the python project, any contributor may become a member of the scikit-learn contributor experience team, after showing some continuity in participating to scikit-learn development (with pull requests and reviews). Any core developer or member of the contributor experience team is welcome to propose a scikit-learn contributor to join the contributor experience team. Other core developers are then consulted: while it is expected that most acceptances will be unanimous, a two-thirds majority is enough. Every new member of the contributor experience team will be announced in the mailing list. Members of the team are welcome to participate in monthly core developer meetings.

#### Communication team

Members of the communication team help with outreach and communication for scikit-learn. The goal of the team is to develop public awareness of scikit-learn, of its features and usage, as well as branding.

For this, they can operate the scikit-learn accounts on various social networks and produce materials.

Every new communicator will be announced in the mailing list. Communicators are welcome to participate in monthly core developer meetings.

## Core developers

Core developers are community members who have shown that they are dedicated to the continued development of the project through ongoing engagement with the community. They have shown they can be trusted to maintain scikit-learn with care. Being a core developer allows contributors to more easily carry on with their project related activities by giving them direct access to the project's repository and is represented as being an organization member on the scikit-learn GitHub organization. Core developers are expected to review code contributions, can merge approved pull requests, can cast votes for and against merging a pull-request, and can be involved in deciding major changes to the API.

New core developers can be nominated by any existing core developers. Once they have been nominated, there will be a vote by the current core developers. Voting on new core developers is one of the few activities that takes place on the project's private management list. While it is expected that most votes will be unanimous, a two-thirds majority of the cast votes is enough. The vote needs to be open for at least 1 week.

Core developers that have not contributed to the project (commits or GitHub comments) in the past 12 months will be asked if they want to become emeritus core developers and recant their commit and voting rights until they become active again. The list of core developers, active and emeritus (with dates at which they became active) is public on the scikit-learn website.

#### **Technical Committee**

The Technical Committee (TC) members are core developers who have additional responsibilities to ensure the smooth running of the project. TC members are expected to participate in strategic planning, and approve changes to the governance model. The purpose of the TC is to ensure a smooth progress from the big-picture perspective. Indeed changes that impact the full project require a synthetic analysis and a consensus that is both explicit and informed. In cases that the core developer community (which includes the TC members) fails to reach such a consensus in the required time frame, the TC is the entity to resolve the issue. Membership of the TC is by nomination by a core developer. A nomination will result in discussion which cannot take more than a month and then a vote by the core developers which will stay open for a week. TC membership votes are subject to a two-third majority of all cast votes as well as a simple majority approval of all the current TC members. TC members who do not actively engage with the TC duties are expected to resign.

The Technical Committee of scikit-learn consists of user: 'Thomas Fan <thomasjpfan>', user: 'Alexandre Gramfort <agramfort>', user: 'Olivier Grisel <ogrise>', user: 'Adrin Jalali <adrinjalali>', user: 'Andreas Müller <amueller>', user: 'Joel Nothman <inothman>', user: 'Gaël Varoquaux <Gael Varoquaux>' and user: 'Roman Yurchak <rth>'.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main)\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

 $System\,Message: ERROR/3\, (\texttt{D:}\conboarding-resources}\scample-onboarding-resources\\scample-onboardin$ 

Unknown interpreted text role "user".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main\) (doc) governance.rst, line 113); backlink

Unknown interpreted text role "user".

## **Decision Making Process**

Decisions about the future of the project are made through discussion with all members of the community. All non-sensitive project management discussion takes place on the project contributors' mailing list and the issue tracker. Occasionally, sensitive discussion occurs on a private list.

Scikit-learn uses a "consensus seeking" process for making decisions. The group tries to find a resolution that has no open objections among core developers. At any point during the discussion, any core-developer can call for a vote, which will conclude one month from the call for the vote. Any vote must be backed by a ref. SLEP <slep>`. If no option can gather two thirds of the votes cast, the decision is escalated to the TC, which in turn will use consensus seeking with the fallback option of a simple majority vote if no

consensus can be found within a month. This is what we hereafter may refer to as "the decision making process".

 $System\,Message: ERROR/3~(\mboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\scikit-learn-main)~(doc)~governance.rst, line~127); \backlink$ 

Unknown interpreted text role "ref".

Decisions (in addition to adding core developers and TC membership as above) are made according to the following rules:

- Minor Documentation changes, such as typo fixes, or addition / correction of a sentence, but no change of the scikit-learn org landing page or the "about" page: Requires +1 by a core developer, no -1 by a core developer (lazy consensus), happens on the issue or pull request page. Core developers are expected to give "reasonable time" to others to give their opinion on the pull request if they're not confident others would agree.
- Code changes and major documentation changes require +1 by two core developers, no -1 by a core developer (lazy consensus), happens on the issue of pull-request page.
- Changes to the API principles and changes to dependencies or supported versions happen via a ref. slep` and follows the decision-making process outlined above.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\scikit-learn-main\doc\(scikit-learn-main)\) (doc) governance.rst, line 151); backlink

Unknown interpreted text role 'ref'.

• Changes to the governance model use the same decision process outlined above.

If a veto -1 vote is cast on a lazy consensus, the proposer can appeal to the community and core developers and the change can be approved or rejected using the decision making procedure outlined above.

## **Enhancement proposals (SLEPs)**

For all votes, a proposal must have been made public and discussed before the vote. Such proposal must be a consolidated document, in the form of a 'Scikit-Learn Enhancement Proposal' (SLEP), rather than a long discussion on an issue. A SLEP must be submitted as a pull-request to enhancement proposals using the SLEP template.