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OCT.
2022

09h00
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18h00

2022-T3 GEOMETRY & STATISTICS IN DATA SCIENCES

Geomstats Hackathon

IHP. Salle 201

INSCRIPTION

Geomstats Hackathon

17-21 October 2022 - Institut Henri Poincaré

This hackathon is destined to anyone who is interested in implementations of statistics and learning on nonlinear manifolds. The goal is to gather future and current contributors of the open-source library [Geomstats](#) for a few days of collaborative coding.

About Geomstats

URL de la page : https://www.ihp.fr/fr/agenda/geomstats-hackathon&is_pdf=true

Geomstats is an open-source Python package for computations and statistics on nonlinear manifolds, such as hyperspheres, hyperbolic spaces, Lie groups of transformations, among others. As such, the package supports research within the fast growing field of Geometric (Deep) Learning.

In this context, Geomstats provides code to fulfill four objectives:

- Provide educational support to learn “hands-on” differential geometry and geometric statistics and learning, through its examples and visualizations.
- Foster research in differential geometry and geometric statistics by providing operations on manifolds to gain intuition on results of a research paper;
- Democratize the use of geometric statistics by implementing user-friendly geometric learning algorithms using Scikit-Learn API; and
- Provide a platform to share learning algorithms on manifolds.

The [source code](#) is freely available on GitHub. Geomstats has already found numerous applications, for example in the biomedical fields for machine learning applied to biological shape analysis. Typical usecases can be found within the [notebooks folder](#).

Registration

To participate in the hackathon, please contact us at [Courriel](#) before September 16.

Practical information

Hackathon will be held at IHP in **room 201** at the second floor. The schedule for each day is:

9:00: Start of the day

10:30: Coffee break

12:30 - 13h30: Lunch break

16:30: Coffee break

17:00 - 17:30: Stand-up (open to remote participants)

17:30: End of the day

For remote participation, check the #2022-hackathon-ihp channel on [Slack](#).



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HORAIRES

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.