TWO POSTDOC POSITIONS IN MACHINE LEARNING FOR SINGLE-CELL GENOMICS

Keywords: single-cell genomics, multi-omics, machine learning, graph neural networks, optimal transport

We are looking for two highly motivated postdoctoral scientist (f/m/x) to join the Cantini lab, affiliated to the PaRis Artificial Intelligence Research InstitutE (PRAIRIE https://prairie-institute.fr/), currently at École Normale Supérieure (ENS https://www.ens.psl.eu/en) and soon (Jan 2023) joining Institut Pasteur (https://www.pasteur.fr/fr).

The recruited postdocs will work in Machine Learning for Single Cell Genomics. In particular, they will be developing machine learning methods for multi-omics single-cell data integration, both aimed at studying cellular heterogeneity and its underlying regulatory mechanisms.

Required skills:
- PhD in Data science, Computer Science, Computational Biology, or related fields.
- Previous experience in the design and implementation of machine learning tools/algorithms.
- Strong analytical and programming (R, Python...) skills.
- Previous experience with applications to biology, single-cell data analysis, graph neural networks, or optimal transport will be a plus.

Team and location:
The Cantini lab is an interdisciplinary team composed of researchers in data science, computational biology and bioinformatics. The project will be developed in close collaboration with Gabriel Peyré (ENS http://www.gpeyre.com/).

The recruited researchers will be based with all the team at Institut Pasteur, a world-renowned center of excellence for research in infectious diseases, assuring tight collaboration with computational biology and wet-lab biology experts. In addition, the affiliation to the PRAIRIE institute, one of the 4 Interdisciplinary Institutes for Artificial Intelligence research set up as part of the national strategy for Artificial Intelligence, providing interaction at AI and machine learning level.

Application:
The Postdoc positions will be for 2 years, with possibilities for renewal. To apply, please submit: a cover letter summarizing research interests and expertise and a Curriculum Vitae (including contact information for at least two references) to Laura Cantini (laura.cantini@bio.ens.psl.eu).