

****3** PHD positions to work broadly on large scale optimization for machine learning, supported by an ITN ETN project (<https://trade-opt-itn.eu>)**

All the projects will aim at developing theoretical and algorithmic ideas that can explain the success of current systems as well as suggest the development of novel practical and efficient solutions. Candidates must have strong mathematical and computational skills.

Specific topics of interest include but are not limited to:

- the development of optimization methods (stochastic, accelerated, distributed , parallel) for non-smooth and possibly non convex problems
- exploitation of data geometric structure to develop efficient optimization and machine learning algorithms
- unsupervised features learning from multivariate time series (in collaboration with the SME CAMELOT biomedical systems, <https://www.camelotbio.com>)

While the emphasis is on methodological and computational aspects, the candidates will have the

opportunity to work in close collaborations on a number of applications, in connections with the industrial partners of the project.

All the research activities will be carried out at the University of Genova within a newly formed machine learning center across the Mathematics and Computer Science departments. The center counts over 10 faculties and 30 between PhD students + postdocs and provides a lively and dynamic work environment.

Genova sits amidst of the Italian riviera and offer excellent life quality. PhD salaries are commensurated to international standards, including mobility and family allowance, according to Marie Curie actions.

All position should start November 2020 (delays due to COVID19 are possible). Applicants need to apply to an open call that will be available by end of may.

Eligibility criteria

- Candidates must – at the date of recruitment – have obtained the MSc degree entitling you to embark on a doctorate

- Candidates must – at the date of recruitment – be within the first four years (full-time equivalent research experience) of your research career and not have a doctoral degree

- Mobility rule: candidates must not have resided or carried out your main activity (work, studies, etc.) in the country of the host organisation you are applying (i.e. Italy) for

more than 12 months in the 3 years immediately prior to the recruitment date. Compulsory national service and/or short stays such as holidays are not taken into account.

Please make sure you comply with the eligibility criteria before applying. You need to be able to provide documentation proving your eligibility for recruitment. You can read the full description of eligibility criteria in the Information Note for ITN Fellows.

At this point, we recommend prospective candidates to make an expression of interest by filling this

https://docs.google.com/forms/d/e/1FAIpQLSddINJ-ox1MySLYyuTKDWvkYnmuBNkWSdAVJbgjL909N7zSEw/viewform?usp=sf_link

within the ***31st of May***.

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