

The **Vienna School of Mathematics (VSM)** is a joint graduate school of the mathematics faculties of the **University of Vienna** and the **TU Wien**. The VSM is devoted to top-level PhD education in all branches of mathematics. It fosters intra- and interdisciplinary scientific cooperation and networking among students and advisors and aims at increasing the international visibility of the Vienna area as a center for mathematics.

The VSM currently announces a PhD position in the area of

Computational Optimization (University of Vienna, Supervisors: Y. Malitskyi)

This project is concerned with a highly topical problem at the intersection of Optimization and Machine Learning.

The basic requirement for the position is a strong and solid background in analysis, as well as some experience with programming languages such as Python, R, or Julia. Additional knowledge in optimization, numerical methods, machine learning will be an advantage.

The potential thesis project will involve the development of new optimization algorithms, their analysis, and their applications in machine learning, optimal transport, etc. The concrete thesis project will be developed jointly with the successful applicant.

The advertised position is associated with the Faculty of Mathematics of the **University of Vienna** in the Research Group of Yurii Malitskyi. The successful candidate will become a member of the Vienna School of Mathematics and is expected to contribute to its activities. The extent of employment is 30 hours per week. The position will start on March 1, 2024, but the date may be adjusted accordingly.

Application Requirements and Procedure

The candidates must have a master degree (or equivalent) in Mathematics or Computer Science at the moment the PhD position starts. The application documents should contain a letter of motivation; CV; higher education certificates/diplomas; and letter(s) of recommendation preferably sent directly to yurii.malitskyi@univie.ac.at by the person writing the letter. In your motivation letter address which areas of mathematics you know best, what you know about optimization-related areas, and why you want to do a PhD in this area. Applications have to be submitted in the application system of the University of Vienna for Job ID 1814 at the following [link](#), if possible in a single PDF file. The deadline for applications is **January 27, 2024**.