

80% Senior Researcher (Postdoc) position for a project in Operations Research in collaboration with the Swiss federal railways at the University of Fribourg (Switzerland)

An 80% Senior Researcher (Postdoctoral) position is available from November 2026 to October 2027 at the Department of Informatics, University of Fribourg, within the Decision Support & Operations Research (DS&OR) group. The DS&OR group is affiliated with the Smart Living Lab (SLL) (<https://www.smartlivinglab.ch/en/>), a transdisciplinary research initiative bringing together groups from EPFL, HEIA-FR, and the University of Fribourg.

Project Description

The senior researcher will work on a project in collaboration with the Swiss Federal Railways (SBB). The project focuses on the scheduling of on-board ticket inspections in regional trains to deter fare evasion while satisfying operational and contractual constraints. The inspection plans need to be strategically effective in order to avoid predictable inspection patterns and to account for operational uncertainties.

The position is funded for one year. The expected starting date is November 1st, 2026 at the latest. The University of Fribourg offers competitive salaries and provides the opportunity to attend national and international conferences.

Further information about the group: <https://www.unifr.ch/inf/dsor/en/>

Candidate Profile

The candidate must:

- have a PhD in Operations Research, Computer Science, Mathematics, or a related field;
- have a strong background in operations research applied to transportation, and expertise in mathematical programming (including decomposition methods such as column generation), stochastic optimization, and game theory;
- be proactive, collaborative, and willing to work in an interdisciplinary environment with industrial partners.

Application

To apply, please send a CV, motivation letter, and contact details of two references to Dr. Nour Elhouda Tellache (nourelhouda.tellache@unifr.ch). Formal evaluation of the applications will begin on August 17th, 2026. Applications beyond that date might be considered.