

OPERATIONS RESEARCH POST-DOCTORAL POSITION

Laboratoire d'Informatique Fondamentale et Appliquée de Tours (EA 6300)
Operations research, scheduling, and transportation research group (ERL 7002 CNRS)
64 Avenue Jean Portalis, 37200 Tours (France)

Keywords: tourist trip design problems, optimal paths problems, vehicle routing, mathematical programming, metaheuristics, databases, geographical information systems.

DESCRIPTION

Centre-Val de Loire is one of the main touristic hubs in France. Its magnificent chateaux, beautiful natural parks, reputed appellations, charming towns, and world-renowned cycling paths attract millions of visitors to the region every year. Planning a trip to the region taking into account the number and variety of points of interest can quickly become an overwhelming task for these tourists. The Smart Loire project aims to provide tourists with an integrated platform to facilitate this task.

One of the key components of the Smart Loire platform is a decision support tool that helps tourists design trips according to their profile (e.g., preferences, history of visits), budget and time constraints, the characteristics of their party (e.g., number of kids and their ages), and external elements such as the weather and the expected crowd at the touristic sites. This tool is to be supported by optimization algorithms solving a rich variant of a tourist trip design problem. The post-doctoral fellow is expected to contribute to the design, implementation, and testing of these algorithms.

CONTEXT

This is a 12-month (non-renewable) position funded by the Centre Val de Loire region through project Smart Loire. The fellow will be based at Polytech Tours (<http://polytech.univ-tours.fr>) and be part of the ROOT research group (<https://li.univ-tours.fr/teams/root/>). The salary is around 2k€/month (net). It includes social security (health, retirement, etc.) and paid vacations. The start date can be set at any time between Jul. 2018 and Dec. 2018, according to the selected candidate's preference.

DESIRED QUALIFICATIONS

The ideal applicant holds a Ph.D. in computer science, applied mathematics, operations research, or related areas; has a publication record including talks in top level conferences and ISI-indexed journals; and is able to communicate comfortably in English. Knowledge of French is only necessary for making life more pleasant in France but not professionally required. The candidate should have advanced programming skills in C++ or Java. Basic knowledge of databases, SQL, XML, and geographical information systems is a plus. Previous experience on tourist trip design problems, routing problems in general, or optimal path problems is desired but not mandatory.

CONTACT

Interested applicants should contact Dr. Jorge E. Mendoza (jorge.mendoza@univ-tours.fr) and Dr. Yannick Kergosien (yannick.kergosien@univ-tours.fr), attaching to the email: a cover letter, an up-to-date CV, a PDF copy of their Ph.D. dissertation and/or articles published in academic journals (up to 3), and the name and contact information of 2 professional references. Please use the tag "[Smart Loire] application" as the subject of the email. The deadline for applications is May 1, 2018.