

NEC Europe Ltd. is a subsidiary of NEC Corporation, a world leader in the computer and communications market with a large base of R&D Laboratories in Japan, China, USA, and Europe.

NEC Laboratories Europe has an immediate opening for an

Internship/Master Thesis on

“Development of a Fleet Optimization Software Framework based on Metaheuristics”

[ref: 2016-12-61-ITS]

Over the past few years NEC Laboratories Europe (NLE) has been developing advanced analytics and optimization technologies for fleet operations which can be applied to various real-world transportation problems for optimization of mobility of people and goods, such as public transport optimization, EV fleet routing and logistics scheduling. With a series of algorithms and solvers developed we are now creating a generalized but robust heuristic framework for fleet optimization. To support this goal, NLE is looking for a student to carry out an internship at our premises in Heidelberg who can design and implement parts of this framework and validate the functionality with multiple real time data feeds from various fleet related data.

The internship includes the following work items:

- Understand the design goals of the fleet optimization framework;
- Understand the optimization algorithms/solvers in co-ordination with our team;
- Implement parts of the solvers and test for robustness.
- Validate the prototype and test for performance and scalability

Required Skills:

- Strong academic background on operations research, esp. optimization algorithms, and computer science
- Experience in developing software in a team
- Ability to deeply understand algorithms and implementation tasks
- Hands-on experience with Python
- Team working spirit, good organization and communication skills in English

Benefits:

- Exposure to the field of high-performing real-time fleet optimization software
- Excellent opportunities to obtain experience in an industrial working environment
- Opportunity to publish papers in international conferences
- Students receive common indemnification

Preferred starting date: April 2017

Duration: 6 months

Please send your application via the following webpage: <http://www.neclab.eu/jobs> with reference to **[2016-12-61-ITS]**.

For questions, please contact:

Roberto Baldessari
Email: Roberto.Baldessari@neclab.eu
Tel. +49-6221-4342-0 /
<http://www.neclab.eu/jobs>