



# **R&D Data Scientist**

Job ID: 2018-1 Location: Madrid, Spain Job Type: Full Time

## Context and background:

Nommon (www.nommon.es) is a research-intensive technology company that provides decision support tools and consulting services for organisational intelligence and policy assessment. Nommon works in sectors whose performance emerges from the complex interaction of interdependent policies, technologies, and socioeconomic trends, including transport systems, logistics and supply chain, energy and environment, retail and geomarketing, and urban and regional planning. In these and other fields, characterising, understanding and predicting the way people organise their daily activities, travel across a city or region and occupy public space is of paramount importance. For decades, research on the behavioural and societal factors that influence human activity and mobility patterns has relied on cross-sectional (static) demographic and economic datasets, often consisting of very small samples, usually complemented with assumptions about the permanence of behavioural traits over time. This situation is now changing: thanks to the proliferation of smart devices and interconnected services, we have large-scale, detailed longitudinal (dynamic) data that allow us to test hypotheses about activity-travel behaviour and its evolution over time. In order to explore and exploit these opportunities, in February 2015 we launched Kineo (www.kineo-analytics.com), a Nommon subsidiary company that mines and analyses anonymised geolocation data from mobile devices to extract meaningful and actionable information about people's activity and mobility patterns. During the past few years, an ambitious research and development strategy has put Nommon and Kineo at the forefront of innovation in the mobility and transport analytics market and has led to continuous company growth. Our research agenda is structured around three main pillars: (i) big data processing and spatio-temporal data analysis, (ii) complex systems modelling and data-driven simulation, and (iii) information visualisation and visual analytics. As part of our expansion, we are now looking for a Data Scientist to join our Research and Development department in Madrid.

#### Job description:

The candidate will join a multidisciplinary team working in a variety of R&D projects dealing with the study of mobility patterns and transportation systems. His/her main responsibilities will include:

- develop new methods, algorithms and tools for the integration, analysis and visualisation of spatio-temporal data originated from multiple distributed sources;
- combine theory-driven and data-driven approaches to study human mobility and transport demand;
- contribute to the definition of innovative products, services and business models.

#### **Qualifications and skills:**

### Required:

- MSc/PhD in a relevant scientific field, such as Engineering, Mathematics or Physics.
- Outstanding academic record.
- Strong mathematical and statistical background.
- Strong algorithmic, programming and computational problem solving skills.
- Marked taste for interdisciplinary work at the intersection of engineering and the social sciences.
- Excellent English and Spanish oral and written communication skills.

#### Nice to have, but not indispensable:

- Experience/knowledge in geospatial data analysis and machine learning.
- Experience/knowledge in optimisation and operational research.
- Experience/knowledge in data visualisation.
- Experience/knowledge in development and/or use of computational simulation tools.
- Experience/knowledge in programming in C, C++, Python, R, Matlab or Java.

To apply for this position, please email your CV and a copy of your academic transcript along with a covering letter to <a href="mailto:rrhh@nommon.es">rrhh@nommon.es</a>