

AERO UC3M PhD Position Open on Data Science and Aviation

Research topic

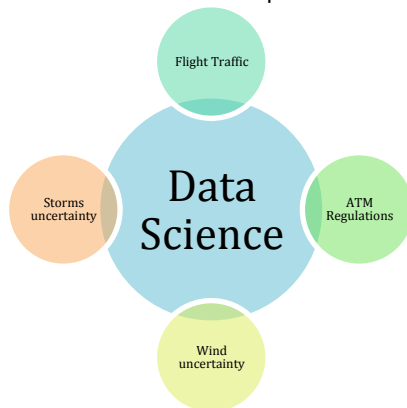
The PhD topic will be related to **data science techniques** applied to **air traffic management**

Arising data science applications in air traffic management are vast. e.g., commercial aircraft trajectory planning, aircraft/engines maintenance, air traffic configuration sector design. The focus will be on the **analysis of different adverse weather phenomena and the minimization of its impact in terms of safety, capacity, cost, and environment**. In any case the topic is in certain way open.

Requirements and conditions

The ideal candidate will have:

- A university degree (**Master's level or equivalent**) **mathematical sciences, data science/big data, or transportation/aviation engineering**
- Skills on optimization, statistics, and algorithmic programming (python preferred).
- Skills of data science, e.g. knowledge discovery in databases (artificial intelligence, machine learning).
- Solid skills in both written and spoken English.
- Great dose of imagination, problem solving skills, passion, and eagerness to learn.
- A strong academic record and international experience.



Benefits and conditions

The successful candidate will be enrolled in the Department of Bioengineering and Aerospace Engineering (Area of Aerospace Engineering) of the University Carlos III de Madrid (UC3M). In particular, she/he will work within ASAP (dynamics and control of aerospace systems) research group - <https://aero.uc3m.es/DynamicsAndControlAerospaceSystems.html>.

The conditions are as follows:

- Salary and duration of the appointment are those determined by UC3M for PhD students (typically 14k to 18k € gross per year and 3-4 years).
- Additional salary complements for the participation in both European and National research projects (see TBO-Met and OptMet as examples), and in contracts with different companies, e.g., Boeing Research and Technology.
- Additional elements: laptop computer; and Health Insurance Covered by the Spanish health system.
- International secondments in prestigious universities and research centers will be granted. Our PhD students have visited in the past, e.g., ETH Zürich, ENAC, ESA, and University of Illinois Urbana-Champaign.
- Opportunity to travel to international conferences (Europe and overseas) and present research activities. Publication in top quality journals.
- Become part of a young, dynamic, highly qualified, collaborative team.
- Flexible working environment and schedule.
- The possibility to develop a unique career outside of mainstream: academia, research centers, international environment, private companies and start-ups.
- An agile working methodology; ASAP recently implemented JIRA/Scrum and all the research is done on a collaborative wiki/Confluence.

To Apply

Email directly to **Javier García Heras** (gcarrete@ing.uc3m.es) and **Manuel Soler** (masolera@ing.uc3m.es) with: 1) a **CV**; 2) a **motivation letter** indicating your interest in the topic. Moreover, recommendation letters (or the name and contact info of recommendation person) are welcomed (though not mandatory).

Deadline

Call for applications will remain open until an adequate candidate is found. Expected **start will be in September**. Ideally, we would like to do the selection process **no later than May**.