



# TADOREA

KNOWLEDGE DISCOVERY FOR AVIATION

## PhD Candidate offer

Tadorea ([www.tadorea.com](http://www.tadorea.com)), in collaboration with Innaxis ([www.innaxis.org](http://www.innaxis.org)) and the **Universidad Politécnica de Madrid** (<http://www.etsit.upm.es/>), is currently seeking a PhD candidate to undertake his/her PhD programme in the **Data Science** field applied to **aviation**, and in particular, focussing on developing methods to ensure **privacy-aware analytics**.

The selected candidate will join Tadorea's team in Madrid, Spain. His/her PhD thesis will be supervised by Pr. Dr. Victor A. Villagr  from the UPM-RSTI (<https://blogs.upm.es/rsti/>) who will be driving the research plan in **applying state-of-the-art cryptography techniques to overcome data sharing barriers in the aviation sector**. The combination of skills from the Tadorea and the UPM-RSTI teams will offer the candidate an ideal environment to develop his/her professional career in an environment with strong ATM-domain expertise and state-of-the-art data science, cybersecurity and privacy-preserving techniques.

Requirements are as follows:

- A **university degree** in Mathematics, Computer Sciences, Physics, Engineering or a related program.
- Familiar with common **Machine Learning** and **Deep Learning** methods.
- Basic understanding of **cryptographic** systems.
- Strong **programming** skill at least in one modern language.
- Fluency in **English**. Only candidates fluent in English should apply, as the interviews will be carried out in English.
- Above all, a strong motivation in developing skills in privacy-preserving data analytics.

Other skills that may be relevant in the evaluation

- Passion for **data science** on top of current thinking and trends
- Full proficiency in **Python 3**
- Common **data science** (Numpy, Pandas, Seaborn, scikit, keras) and cryptography (hashlib, pyca/cryptography) **toolkits**.
- Knowledge, experience or passion within **aviation**.

Tadorea offers a unique set of benefits:

- An unique opportunity to start a career in **Data Science** and help to solve real world problems. **Immediate start**, the PhD is framed under the SESAR-Engage Knowledge Transfer Network (<http://engagektn.com/>) and co-funded by it.
- Participation in **summer schools** and **international conferences**.
- Access to a variety of **interesting datasets**: from airlines, airports, air navigation service providers to other aviation stakeholders.
- Integration in a highly qualified, very collaborative, young, international **team**.
- A beautiful office in the center of **Madrid**.
- **Flexible** schedule and excellent working conditions.
- A gross salary of **22.000€/year**

Interested candidates should send a **CV** to [discovery@tadorea.com](mailto:discovery@tadorea.com). A **research motivational letter** or any other **relevant information** supporting the application, such as GitHub and/or Stack Overflow profiles, website-blog, portfolio, LinkedIn account, etc. will be highly appreciated.