

The University of Toulouse seeks to hire outstanding candidates for Master/Engineering school internship positions in artificial intelligence and machine learning at its new Institute on Artificial and Natural Intelligence (ANITI). ANITI strongly encourages applications from women and is fully committed to improving gender balance across all branches of artificial intelligence.

About ANITI: The French government, in consultation with an international jury of experts, has selected ANITI to be one of four, highly visible interdisciplinary institutes spearheading AI research, education, and economic development in France. The ambition of ANITI is to develop a new generation of artificial intelligence called hybrid AI, associating in an integrated way data driven machine learning techniques and symbolic and formal methods allowing to express constraints and to carry out logical reasoning. The objective is to provide better guarantees in terms of reliability, robustness and ability to explain the results of systems integrating AI algorithms, while ensuring their social acceptability and economic viability. Such guarantees are required by many applications such as autonomous transport, industry of the future, health, environment, space, insurance, etc. This approach will also facilitate decision support and optimize the performance of industrial systems and processes.

ANITI's scientific project is structured around three major integrative programs:

1) Acceptable AI, 2) Certifiable AI, 3) Collaborative AI.

Each integrative program is designed to foster exchanges between researchers and industry to address issues raised by one or more application areas through scientific advances in fundamental areas of AI. The scientific challenges addressed in the integrative programs are elaborated in **twelve themes**.

- 1) **AI and Society**
- 2) **Learning with little or complex data**
- 3) **Fair Learning**
- 4) **Explainable AI**
- 5) **Optimisation and game theory for AI**
- 6) **Certifiable AI: Safe design and embeddability**
- 7) **AI and physical models**
- 8) **Automatic reasoning and decision**
- 9) **Data and anomalies**
- 10) **Language**
- 11) **Robotics and AI**
- 12) **Neurosciences and AI**

Starting operations in autumn 2019, ANITI brings together more than 200 researchers and about thirty companies (Airbus, Thales, Continental, Renault, NXP, ATOS, ACTIA, BRL, CNES, CS, Capgemini, Caisse d'Épargne MP, EDF, SopraSteria, IBM, Linagora, Liebherr, Quantmetry, Scalian, Vitesco Tech., etc.). Twenty four research chairs are funded in this context, supported by PhD students, Post-Docs and engineers. The project also promotes international mobility and collaboration to attract outstanding students and researchers.

Relevant pointers about ANITI available at : <http://aniti.univ-toulouse.fr>

Some examples of offers are available at: <https://aniti.univ-toulouse.fr/offres-de-stages/>

Not all offers are published at the web site.

APPLICATION PROCEDURE

Formal applications should include detailed CV, a motivation letter and transcripts of bachelors' degrees. Reference letters will be a plus.

Applications should be sent by email to: aniti-stage@univ-toulouse.fr