

## Research position in Statistics and Artificial Intelligence

University of Rennes 1 and ENSAI open a research position at the interface of three research departments: CREST (<http://crest.science/>), IRMAR (<https://irmar.univ-rennes1.fr>) and IRISA (<http://www.irisa.fr>). Together they gather more than 400 permanent researchers conducting research and education at undergraduate, graduate and postgraduate levels in the fields of Mathematics, Applied Mathematics, Statistics and Computer Science, featuring internationally renowned researchers (9 ERC awardees, 8 IUF members, 3 CNRS medals, 2 ACM fellows) and projects. Among these 400 researchers, about 15% directly contribute to AI research fields while more than 30% rely on AI technology in their research. Partnership of the research departments involve collaborations with top-level research and education institutions worldwide and with leading industry partners from large international groups to a vibrant local pool of SMEs, with today 100+ ongoing projects with an AI component.

We are looking for a researcher willing to contribute to unique, highly innovative and technically challenging research at the crossroad of Statistics, Machine Learning and Artificial Intelligence (AI) from a mixed perspective combining Mathematics and Computer Science in AI. Relevant research topics include, but are not limited to : combining statistical and deep learning, theoretical bounds for robust deep learning, domain adaptation, optimal transport, high-dimensional time series analysis, graph theory and manifold learning, random graphs, intelligent compressive sensing, etc. The chaire holder will be encouraged to address the fundamental challenge of designing machine learning and AI techniques endowed with solid statistical/mathematical guarantees as well as resource efficiency, with potential applications (e.g., health, smart territories, cybersecurity, ...). S/he will reinforce an internationally competitive research group fostering active collaboration between the partner institutions. The position includes a reduced teaching service (36 hours per year) with courses responsibility and supervision of master and PhD students.

The position holder will be member of the CREST department and one of the departments of the University of Rennes 1 (IRMAR or IRISA). S/he will spend time in the different laboratories and foster cooperative research across departments. From a practical standpoint, several offices will be provided and research productions will be signed under the “Univ Rennes” label. S/he will be given the opportunity to root his/her activity with one or several the excellency projects in Rennes, namely the mathematical Labex Centre Henri Lebesgue, the computer Science Labex CominLabs, the Technological Research Institute (IRT) [bcom.com](http://bcom.com) and the future Research and Innovation Circle on AI and its application to Defense and Security. Through this environment,

we will facilitate collaboration with companies from the private sector through PhD theses and postdoc funding.

The candidate should have a PhD in Mathematics or Computer Sciences, or equivalent level, with at least 5 years of postdoctoral experience and outstanding research achievements. Full professorship level applications are encouraged. Salary is competitive, according to qualifications. Position could start as soon as November 2019 for a period of 3 years, renewable.

Rennes research departments strive to be an inclusive workplace that promotes equal opportunities and attracts qualified candidates who can contribute to its excellence and diversity. We welcome applications from all sections of the community and from people of all backgrounds.

Applications should be submitted by email to [ressources-humaines@univ-rennes1.fr](mailto:ressources-humaines@univ-rennes1.fr) or [recruitment@ensai.fr](mailto:recruitment@ensai.fr) until 30th September 2019, with reference UniRChairAI/2019 as subject. Documents to include: curriculum vitae; a statement of research and teaching interests (2-4 pages); names and addresses of three or more individuals willing to provide letters of reference.

For further information you may contact Valentin Patilea (CREST, [valentin.patilea@gmail.com](mailto:valentin.patilea@gmail.com)), Valérie Monbet (IRMAR, [valerie.monbet@univ-rennes1.fr](mailto:valerie.monbet@univ-rennes1.fr)), Guillaume Gravier (IRISA, [guig@irisa.fr](mailto:guig@irisa.fr)).

