

French national research institute for digital science and technology

Working together to accelerate the momentum of research and development in digital technology

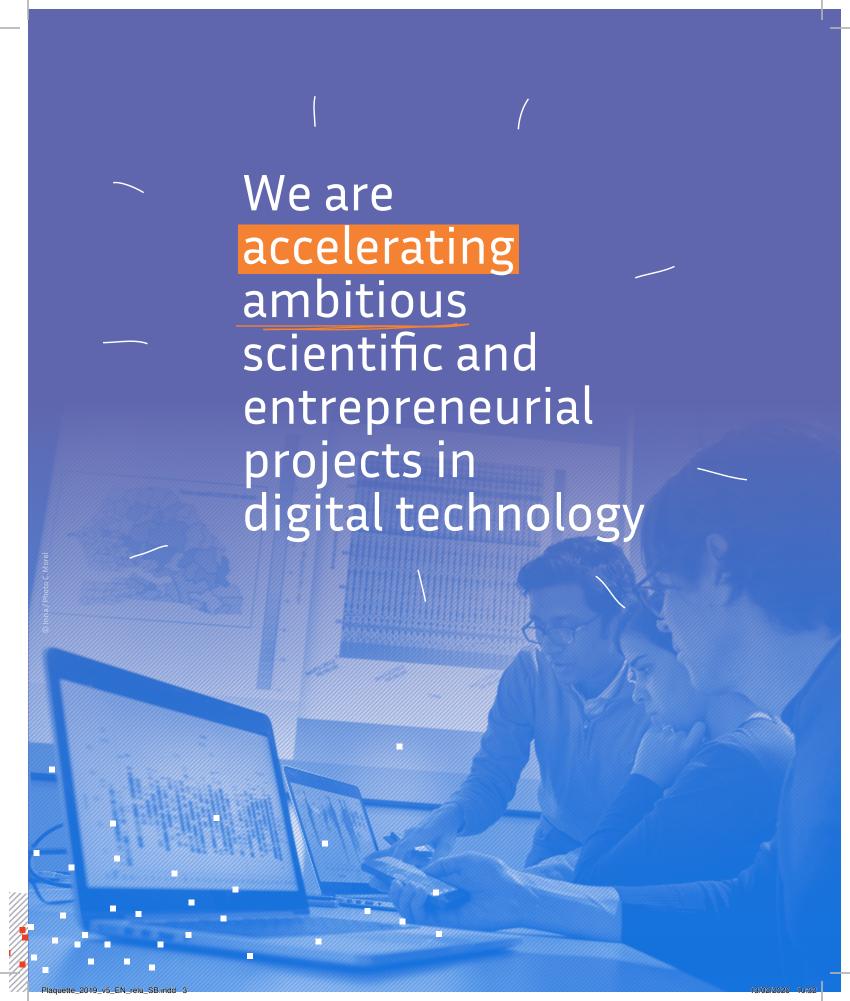
Inria works to promote France's influence in the digital world and boost its scientific and economic attractiveness



France has an extraordinary opportunity to play a leading role in this world which is now digital. The quality of our research in computer science and mathematics is exceptional and recognised as such around the world. The dynamic entrepreneurial culture of the *La French Tech* initiative is exciting. Our industrial fabric is firmly committed to digital transformation.

Against this backdrop, Inria's mission is to contribute, through digital research and innovation, to building our scientific, technological and industrial leadership. Through constant interaction with our partners, universities and companies across open and diverse ecosystems, we ensure that the need to make a strong impact is at the heart of what we do.

Our collective commitment is therefore to create value on a large scale for France on the European stage and to contribute to building a digital society based on innovation and trust in which human beings are always the primary focus.



Digital researchers and innovators: daring to take risks and forging ahead

The Inria ecosystem is producing and developing multi-skilled teams that are at the institute bears the risk while respecting the long-term nature of public research.



Exploring new fields of research based on digital technology to create scientific breakthroughs

Scientists thrive in an environment that encourages exploration, pushing the boundaries of knowledge, often working in interdisciplinary teams that are built in a matter of months. Inria, a public institute, thus promotes disruptive research.

By preferring a posteriori evaluation to a priori selection, we encourage scientists to work as free thinkers. We aim to achieve results that are potentially huge for society.



Researchers and engineers develop and distribute software technologies, often open source and sometimes with a global reach. They help to provide input to other scientific disciplines, to build a technological infrastructure for innovative companies, and to revitalise a long-standing French and European industrial base.



Digital technology that crosses disciplinary boundaries

Using computer science and mathematics, the research and innovation projects of Inria's teams cover all areas of digital science and technology, ranging from digital modelling and simulation to high-performance computing, from data science to artificial intelligence, from robotics to the human-machine interface, from proofing software to digital security, from the Internet to the Web, from

the Internet of Things to **edge computing**, among others.

With digital technology as a driver of interdisciplinarity, we also work in major application areas such as personalised medicine, bioinformatics, precision agriculture and energy and environmental simulation. To build a sustainable digital society, research into frugal digital technology is one of our priorities.

at the highest international level

re accelerating ambitious projects. research.



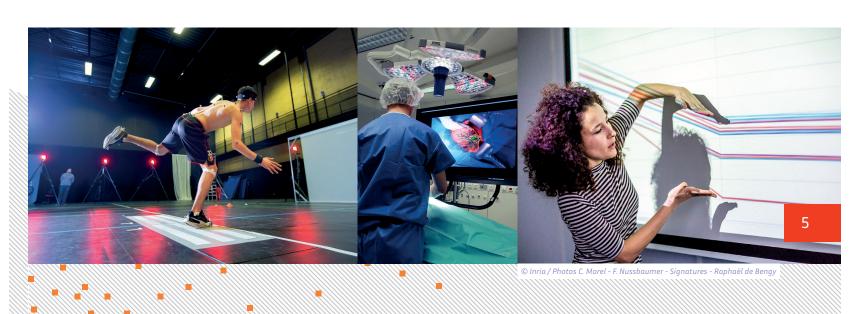
Accelerating entrepreneurial projects that create value for the economy and for society

Researchers and engineers are also supported in Deep Tech startup projects. With Inria Startup Studio, we want to support more job-creating startups that will turn into "real" companies or be acquired by existing companies, potentially emerging as companies with a global footprint in the future.



Supporting the development of major research universities and fulfilling the economic ambitions of the regions

Firmly rooted in the academic, entrepreneurial and industrial ecosystems that digital technology is energising, Inria is fully committed, through its research centres, to the development of major world-class research and innovation universities. As a national institute, Inria is also committed to supporting the regions to help them achieve their ambitions.



Plaquette_2019_v5_EN_relu_SB.indd 5 13/02/2020 10:32



Operating at the highest international level and attracting talent

In the digital world, it's all about talent. Inria recruits at the highest academic level. In recognition of its policy of excellence, the institute was awarded the European Union's HRS4R label in 2019. It is also rolling out a global attractiveness programme to attract digital talent to France.



Inria is the leading European player in terms of number of European Research Council (ERC) grants in the digital technology arena, with 59 recipients since 2007 (more than twice those received by the secondplace holder). Each year, members of Inria project teams produce more than 4,000 publications.



The annual number of digital Deep Tech startup projects that Inria aims to reach in 2023 as part of its new technology entrepreneurship programme (Inria Startup Studio) with Bpifrance.

Over the past 20 years, Inria has been involved in founding more than 170



The number of Scikit Learn users, the Data Science and Artificial Intelligence toolkit created and supported at Inria. Every year, around a hundred software applications are registered by members of Inria's project teams.



3/02/2020 10:32

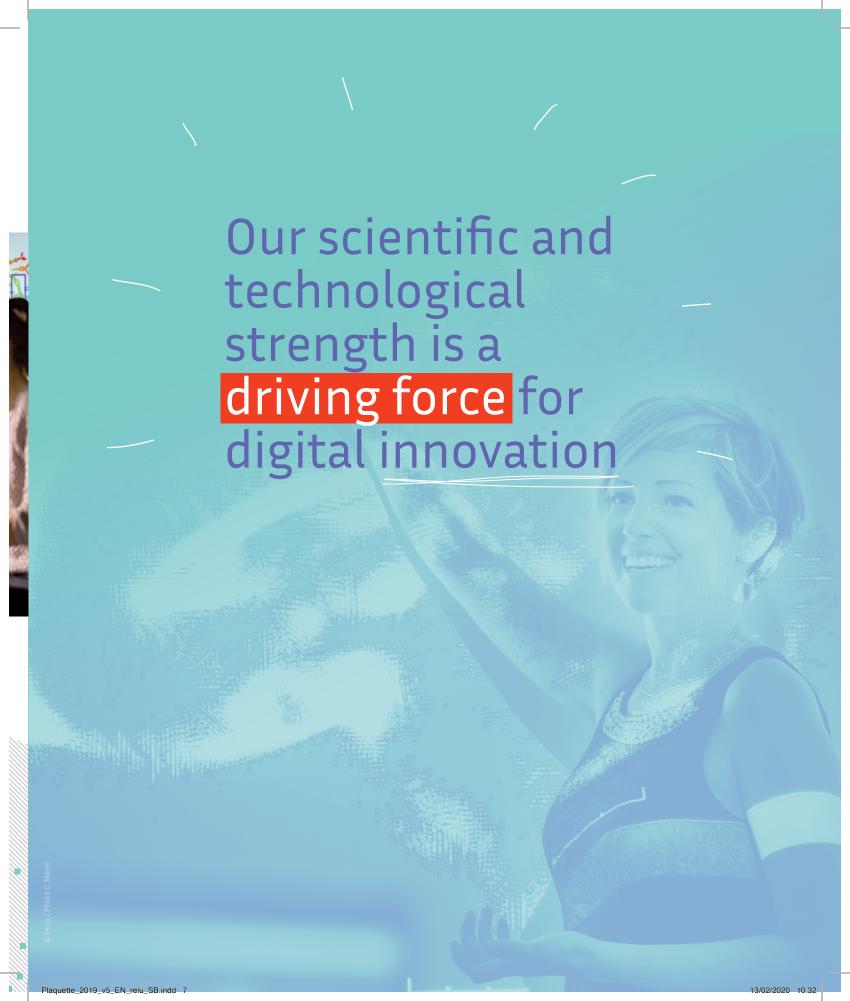
// Inria Startup Studio: Inria's technology entrepreneurship programme

Inria Startup Studio is the institute's new programme designed to provide end-to-end support for deep tech startup projects arising from digital research. It generates and accelerates innovative and ambitious entrepreneurial projects.

Scientists, whether researchers or engineers, especially younger ones, are thus able to create a startup within a few months and, if necessary, "pivot" it quickly.

Inria Startup Studio relies on the **expert transfer** and innovation teams dedicated to entrepreneurs in each Inria research centre, all to the advantage of its academic ecosystem. It extends and renews Inria's long-standing commitment to the creation of startups by focusing on technological entrepreneurship.

Plaquette 2019 v5 EN relu SB.indd 6



Innovation is stimulated by an environment of excellence in a thriving

The digital dynamic stems from an ecosystem, mobility, interdisciplinarity and is even greater when they work in an exceptionally supportive environment.



The project team model provides an agile framework for academic excellence and innovation in digital technology

Project teams consisting of 10 to 30 people work independently on a research and innovation project lasting four years, including a national evaluation. The teams are built in partnership with other academic organisations (universities, CNRS, etc.) and can quickly adapt to each new challenge. This model is central to Inria's organisational structure.



Inria makes a major contribution to France's European and international influence in the digital world Scientific collaborations with universities and grandes écoles, in France and internationally (with its centre in Chile), contribute to local and global ecosystems. Through its participation in European schemes and programmes, Inria supports France's commitment to the European Research and Innovation Area.



ng ecosystem

and openness. The impact of scientists



Ambitious partnerships are forged with the industrial world Inria has a long tradition of industrial partnerships with French and European companies - large groups, intermediate sized companies and SMEs - and with firms outside Europe, often world leaders in technology, who invest in France. Our ambition is to build joint project teams with these companies.



Interdisciplinarity fosters the cross-fertilisation of scientific skills, approaches and cultures The project team model lends itself to interdisciplinary dialogue and paves the way for the creation of new scientific disciplines that leverage digital technology.



Internal incentive and support systems provide rapid support to researchers, engineers and entrepreneurs Several programmes developed by Inria encourage risk-taking in science, in technological development, in the distribution of open source software and in the creation of startups. They shape Inria's policy.

// Inria, a contributor to regional dynamics

In France, Inria has a strong regional presence with 8 research centres and 6 branches, all embedded in research and innovation ecosystems at the heart of major university campuses and integrated into industrial and entrepreneurial digital

networks driving the attractiveness and influence of the regions. The institute is fully committed to ensuring that these major university campuses have a global reach. → List of centres and local sites at the back of this brochure



The commitment of Inria's research and innovation support teams is a key factor in maintaining our momentum and performance.

200

The indicative number of project teams, central to the Inria model.

-3,500

The number of scientists (researchers, engineers, PhD researchers or postdoc students) working in Inria project teams.

- **80**%

The percentage of joint project teams with universities, engineering schools and other French research organisations (CNRS, Inrae, Inserm, etc.).

_ 100 _

The number of nationalities represented in the institute.



The Inria Foundation supports initiatives that make digital technology more meaningful. It contributes to funding projects that address major digital challenges facing our society.

- → **Contributes** to progress in health and disability issues.
- → **Helps** to develop digital science education resources for all.
- → Responds to the urgent challenges of a sustainable, united and responsible society.
- → Contributes to an open and trusting digital society.

Plaquette_2019_v5_EN_relu_SB.indd 10

For a digital society based on innovation and trust

As a national research institute, Inria addresses the challenges of digital transformation by strengthening the position of science in society, by disseminating scientific knowledge to all audiences, by participating in ethical debates and by supporting public policies for the rational development of digital technology in society.

Inria has also made a long-term commitment to training digital technology trainers and raising awareness of digital issues in schools.



Making artificial intelligence work for humans

Making France a world leader in artificial intelligence (AI), while striking a balance between performance and responsibility, is the ambition of the national AI programme that Inria coordinates. This involves setting up Interdisciplinary Institutes for Artificial Intelligence (3IAs), consortia embedded in university clusters, and creating a global centre of AI expertise supported by the institute.



Accelerating the momentum behind open science

Through its many projects, and within the framework of the National Plan for Open Science, Inria reaffirms its commitment to open science, data and technology. As a software institute, Inria naturally supports Software Heritage, the "Library of Alexandria of software" project.

7 Guaranteeing digital security

To build a trusted digital society, Inria has placed digital security research at the top of its list of priorities, often through joint actions with major public players in this field (such as ANSSI).



Accelerating the pace of innovation: Inria and *La French Tech*

Inria is a key player in *La French Tech*, promoting the influence and attractiveness of France through digital technology, for example, by prototyping several initiatives or registering its research centres in *La French Tech* hubs.

13/02/2020 10:32





inria.fr/en in





