



Position Announcement

André Hoffmann Fellow: Data & AI Systems for Global Climate Modeling

The World Economic Forum and Columbia Business School seek a Hoffmann Fellow for a two-year joint appointment for work at the intersection of society, science, and technology. The Fellow will be based jointly at the World Economic Forum's Center for the Fourth Industrial Revolution in San Francisco, California, which is dedicated to addressing the possibilities and challenges posed by the rapid pace of technological innovation in the Fourth Industrial Revolution, and Columbia Business School, a dynamic center of research, with faculty, postdoctoral, visiting scholars, and doctoral students taking a wide range of approaches to social science research with applied implications.

Hoffmann Fellowship Program

The André Hoffmann Fellowship for the Fourth Industrial Revolution offers early-career academics the opportunity to work at the intersection of society, science and technology through a joint appointment between the World Economic Forum and leading academic institutions.

The two-year Hoffmann Fellowship term is co-hosted evenly between the World Economic Forum and a partnering academic institution. Fellows are expected to commit full-time to the role. With joint guidance from a Forum project director and a faculty supervisor, the Fellow will help build and drive intensive collaborations among the Forum and academic institution partners to deliver specific action-oriented outcomes through:

- Developing and executing initiatives to bring technology to bear on solving important global challenges
- Engaging Forum Partners – including leaders from the private sector, governments, international organizations, civil society and faculty from diverse academic disciplines – to build selected initiatives
- Researching key issues and the potential to harness Fourth Industrial Revolution innovations to provide solutions

About the Project

The intent of the project is to identify the best path forward to leverage climate projection information, especially leveraging artificial intelligence, for climate action at scale. Central to doing this work will be action-oriented deliverables, such as written best use-cases in which climate projections have been successfully leveraged to define climate adaptation strategies at regional, national, and sub-national level per defined end-user group.

The Fellow will spearhead a project aimed at addressing the barriers to scale hindering the effective use of climate model data for climate action. This could include: 1) Data compatibility and accessibility,

working towards inclusive and accessible climate datasets. 2) Increasing inclusive access to climate projection data, especially for developing countries. 3) Strengthening domain expertise and management capabilities to turn insights from climate model projections into actionable policy making decisions. In particular, the project will focus on: (a) defining high impact application areas to leverage climate projection information for climate action and adaptation; (b) assessing potential end-user groups and their needs that accurate climate projections can address; and (c) addressing technical barriers to scale and accessibility in data, and for harnessing AI. The Fellow will report to the Head of Artificial Intelligence & Machine Learning at the World Economic Forum.

About the Research

The Fellow will also conduct state-of-the-art research related climate change and climate adaptation. This could include, but is not limited to, understanding public and private stakeholders' responses, and adaptation, to climate projections and climate-related initiatives. The exact nature of this research could vary, as it will depend on the Fellow's research area of focus and interests. The Fellow will report to and work with Vanessa Burbano, the Sidney Taurel Associate Professor of Management, at Columbia Business School and Director of Corporate Engagement for [LEAP](#) (Learning the Earth with Artificial Intelligence and Physics).

Preferred Requirements and Experience

The candidate will be assessed on their fit with both (1) the research aspect, and (2) the program aspect, of the Fellowship.

- With respect to the fit with the research aspect:
 - Candidates for the Hoffmann Fellowship come from a diversity of disciplinary and social backgrounds. We are looking for a candidate who will have completed their PhD in a relevant discipline prior to beginning the Fellowship, including but not limited to Management, Strategy, Organizational Behaviour, Economics, Public Policy, Climate & Sustainability, Artificial Intelligence, etc.
 - Candidates will be assessed on the promise of their research program and the fit of their planned research program with the objectives of the fellowship.
- The candidate will also be assessed on their fit with the project role; for example, on qualities such as:
 - Inter-personal skills;
 - Self-starter, with the ability to work independently and as a member of a team, and who can manage multiple projects simultaneously
 - Experience working in or collaborating with the public or private sectors;
 - Ability to work across different cultures and with high-level officials and executives, as the Forum shares its work with a global audience;
 - Command of spoken and written English; proficiency in other languages is an advantage;
 - Strong program and project management experience, with strong organizational skills; and
 - Understanding of the issue of leveraging data for climate modeling.
- One key selection criterion is related to diversity and inclusion. We look for excellence, and at the same time, the program aims to open opportunities for candidates from underrepresented groups and institutions.

Key Responsibilities

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The initial outline for the project would be to:

- Build on the initial work done between LEAP and the World Economic Forum to further define the collaboration.
- Map and review current climate projection efforts and methodologies and assess application areas to drive climate action and adaptation.
- Map and review end-users and associated needs that GMCs can address.
- Develop novel approaches to address above mentioned barriers to scale and uptake.
- Convene relevant stakeholders on the above points to derive input in how to address these challenges.
- Provide recommendations for the use of GMCs to drive climate action through written products, e.g. governance frameworks, use cases, toolkits, best practices and agenda blogs.

About the World Economic Forum

The World Economic Forum, committed to improving the state of the world, is the International Organization for Public-Private Cooperation. The Forum engages the foremost political, business and other leaders of society to shape global, regional and industry agendas. The Forum hosts 18 platforms for advancing public-private cooperation on a range of global, regional and industry issues. The Centre for the Fourth Industrial Revolution is a hub for global, multistakeholder cooperation to develop policy frameworks and advance collaborations that accelerate the benefits of science and technology.

About Columbia Business School and LEAP

Columbia Business School is a dynamic center of research, with faculty, postdoctoral, visiting scholars, and doctoral students taking a wide range of approaches to social science research with applied implications. More information about Columbia Business School can be found [here](#).

[LEAP](#) is a National Science Foundation (NSF) Science and Technology Center (STC) which aims to revolutionize climate projections using Artificial Intelligence for informed targeted climate adaptation. Driven by a collaboration between Columbia University, Teacher's College, NYU, University of California-Irvine, and University of Minnesota, LEAP's mission is to increase the reliability, utility, and reach of climate projections through the integration of climate and data science. The Center is engaging with top climate research laboratories and major computing organizations to optimally utilize the wealth of data available for climate modeling to better predict the future. LEAP also strives to ensure that the broadest range of private and public stakeholders will have access to the tools necessary for informed decision-making on behalf of their communities in the face of climate change.

Duration and Location of the Fellowship

- The André Hoffmann Fellowship is two years in duration and Fellows are asked to commit full time to their role.
- The World Economic Forum and Columbia Business School are looking for a Hoffmann Fellow to contribute to both the project and research roles while jointly reporting to the Head of Artificial

Intelligence & Machine Learning at the World Economic Forum and to the Sidney Taurel Associate Professor of Management at Columbia Business School.

- The role will be based in New York at the Columbia Business School while jointly working with the World Economic Forum in Geneva, New York & San Francisco.
- The Hoffmann Fellow will be working in collaboration with the Forum, the C4IR and Columbia University in New York. Primarily based in New York, depending on project needs, the Fellow will be expected to travel to the Forum's Geneva or San Francisco office occasionally during the two years.

The World Economic Forum and Columbia Business School are equal opportunity employers.

To Apply

Send the following package to mgmtjobsearch@gsb.columbia.edu:

- Curriculum Vitae
- Personal statement addressing:
 - Your past academic research and future academic research plans;
 - Your relevant work experience and how your skills, expertise and networks can help drive this project forward;
 - Any involvement in broader impact activities relevant to the scope of the Hoffmann Fellowship (ocean science, policy, data, and technology);
 - Why you are interested in the Hoffmann Fellowship and how you envision it furthering your career.
- Three (3) references, with at least two (2) references who can speak to your academic research potential and at least one (1) reference who can speak to your broader impact activities.

Term Period is 24 months. Applications will be reviewed on a rolling basis and should be submitted by February 28, 2023 in order to receive full consideration. We expect to make selection by April 29, 2023.