

**Recruitment Information for Project Researcher in
Center for Global Commons, Institute for Future Initiatives, The University of Tokyo**

1. Job title : Project Researcher 1 person
2. Contract period : 2 years from the earliest date after April 1, 2024
3. Renewal or not : None
4. Trial period : Fourteen days from the date of hire.
5. Work location : Center for Global Commons, Institute for Future Initiatives
Hongo Campus, The University of Tokyo (7-3-1 Hongo, Bunkyo-ku, Tokyo)
6. Job description : 1) The Hoffman Fellowship is a two-year fellowship for early-career researchers, run jointly by the University and the World Economic Forum (WEF). Under the grant scheme, the Fellow will research and practice visualization and storytelling methods for more intuitive and compelling social use of scientific knowledge about the crisis of the global environment (global commons).
2) One way is to work with the Carnegie Mellon University Robotics Institute, a WEF collaborator, and to use open-source geospatial systems such as “Earth Time” developed by the Institute.
3) It is expected to contribute to advancing solutions to issues such as climate change, oceans, circular economy, nature loss and food system transformation including by exploring the latest tools and technologies and providing training modules to enable everyone to tell their stories.
For more details, see “André Hoffmann Fellowship Programme Terms of Reference”.
7. Working days and working hour : Under the Discretionary Labor System for Professional Work, the employee is considered to have worked 7 hours and 45 minutes a day, 5 days a week.
8. Holidays : Saturdays, Sundays, holidays based on the National Holiday Law, and December 29th through January 3rd are holidays.
9. Vacation : Annual paid leave granted in accordance with employment regulations. Special leave granted in accordance with employment regulations.
10. Wages, etc. : An annual salary system will be applied, including performance and achievement allowances, in the range of 400,000 yen to 600,000 yen per month, to be determined according to qualifications, experience, etc. Commuting allowance (up to 55,000 yen/month, calculated in accordance with our company's regulations, if the employee meets our requirements). No retirement allowance or bonus.
11. Insurance Coverage : Joined the Ministry of Education, Culture, Sports, Science, and Technology Mutual Aid Association Employment Insurance Coverage.
12. Eligibility Requirements : See “Preferred requirements and experience” of the attachment “André Hoffmann Fellowship Programme Terms of Reference”.
13. Application documents : 1) Curriculum Vitae: The official format of The University of Tokyo must be used and can be downloaded at <https://www.u-tokyo.ac.jp/en/about/jobs.html>
2) Portfolio (list of publications, presentations, and other accomplishments, or introductions of video and media work using visualization and storytelling techniques, etc.)
3) Reason for application and what you can contribute to this project (within 2 pages of A4 paper)
4) Names and contact information of two people who can provide reference opinions about the applicant.

*If the portfolio includes introductions of web-based work, hyperlinks from the PDF file are acceptable. Please keep them accessible during the selection process.

14. How to submit and enquiries : Applications must include all materials indicated in 13. 1)-4) as pdf format, and submitted electronically via e-mail with the title “Project Researcher (Hoffman Fellowship)”:

[info.cgc\[at\]ifi.u-tokyo.ac.jp](mailto:info.cgc@ifi.u-tokyo.ac.jp)

Please replace [at] with @ in the email address above.

You can also contact us at the same e-mail address for enquiries.

15. Application deadline : January 8, 2024 23:59 JST

Short-listed finalists may be contacted to schedule an interview (online, including the presentation of video and media work if applicable).

16. Name of recruiter : The University of Tokyo

17. Status of measures to prevent passive smoking

: Smoking is prohibited on the premises (smoking areas are located outside)

18. Others : 1) Personal information received through this application process will not be used for any other purposes.

2) The University of Tokyo is committed to enhancing the diversity and equality of its candidates. We strongly encourage applications from women and international candidates.

3) If you are personally in contract with foreign governmental bodies, corporations, or you are in receipt of a large benefit (financial or any other form) from foreign governmental bodies during the period of your employment, the provisions of the Foreign Exchange and Foreign Trade Act (FEFTA) may prohibit or restrict the sharing of technology that are designated as controlled technology possibly making it difficult for you to fulfill your duties as an academic or administrative staff of the university as a result. Therefore, in such cases it is necessary to keep such contracts/benefits within the scope where it does not hinder the sharing of technologies necessary for your duties by the university.

Centre for Nature and Climate
André Hoffmann Fellowship Programme

Terms of Reference

Hoffmann Fellow on Visual Technologies
Location: University of Tokyo
Target hire date: April, 2024
Forum Project Director: Rosie Ponting
Academic Institution Faculty Supervisor: Dr Naoko Ishii

HOFFMANN FELLOW ON VISUAL TECHNOLOGIES
(two-year fixed-term programme)

About the Fellowship Programme

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 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 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 World Economic Forum's **Centre for Nature and Climate** has a Global Collaboration team working in partnership with our Knowledge Communities, our Civil Society, Cultural Leader, Youth and Innovator teams, as well as project collaborators advancing the nature and climate agenda. We strive to curate meaningful workstreams and interactions for our community, including through Forum events. In collaboration with our communities, we have identified an urgent need for better communication and collaboration between academics, experts, influential voices and public-private-

philanthropic decision makers to help ensure that decisions today are informed by the latest science and the grassroots experiences of those living the consequences of the nature and climate crisis.

The University of Tokyo Center for Global Commons

The University of Tokyo, also known as UTokyo, is a leading educational institution in Japan. It was established in 1877 as the first national university in Japan. As a leading research university, it offers courses in essentially all academic disciplines at both undergraduate and graduate levels and conducts research throughout the full spectrum of academic activity.

Dr Naoko Ishii is Executive Vice President of University of Tokyo and Professor and Director for Center for Global Commons at University of Tokyo, and also senior executive fellow at Mitsubishi Chemical Corporation on circular economy. Former: CEO of GEF and Deputy Vice-Minister of Finance of Japan, Country Director, World Bank; positions at the International Monetary Fund and Harvard Institute for International Development. Former Co-chair of Future Council for Japan, World Economic Forum. Member of China Council for International Cooperation on Environment and Development. Member of the Leadership Council, UN Sustainable Development Solutions Network, Member of Steering Committee, Global Commons Alliance, Member of Advisory Board, Back to Blue, Member of Advisory Board, EAT Forum. Board member of UN Foundation, Board member of ClimateWorks Foundation, Board member of PACE (Platform for Accelerating Circular Economy), Board member of IGES, Board member of Emergent, and Board Member of GMPB (Global Monitoring Preparedness Board). Also serve as member of Independent High-level Expert Group on Climate Finance, Commissioner of Food Systems Economics Commission, Commissioner of the Global Commission on the Economics of Water, member of G20 High-Level Independent Panel on Financing the Global Commons for Prevention, Preparedness and Response, and Member of the Club of Rome.

Carnegie Mellon University Robotics Institute, CREATE Lab

Carnegie Mellon University has been a birthplace of innovation since its founding in 1900. A private, global research university, it fosters a culture that thrives at the intersection of disciplines including science, technology, art, humanities, business and policy. Its locations in Pittsburgh (US), Doha (Qatar) and Silicon Valley (US) are joined by 19 degree-granting programmes around the world, including in Asia, Australia, Europe, Latin America and Africa (Rwanda).

Professor Illah Nourbakhsh is Professor of Robotics at The Robotics Institute of the Carnegie Mellon University and Director of the CREATE Lab. For more than ten years he has been exploring human-robot interaction with the aim of creating rich, effective and satisfying interactions between humans and robots. Through the [CREATE Lab](#) at Carnegie Mellon, Professor Nourbakhsh and his team partnering with the World Economic Forum have developed and honed an open-source, geospatial system called [EarthTime](#), which allows viewers to zoom into any location on the planet and timelapse changes through time. Over 4,000 peer-reviewed data layers have been added from leading universities around the world to enable storytellers to explain the causes and consequences of changes to our planet over time. This system has been showcased in over 25 World Economic Forum meetings, and has been embedded into the World Economic Forum's [Strategic Intelligence](#) platform. In the years ahead, this system will be integrated with open access documentary footage from leading film-makers around the world through a new social enterprise called Open Planet, to

tell the micro and macro stories of changes to our planet, to enable anyone to tell the stories of change to our planet and help catalyse unprecedented action at scale.

Project description

The challenge

The climate crisis, extreme weather and ecosystem collapse are the [biggest threats to humanity's long-term future](#). A global temperature rise of 1.5°C is a physical limit, not a political target, [according to Johan Rockström](#). We are currently on a trajectory to 2.8°C. Scientifically, this is not a climate crisis, but a planetary crisis. [Breaching Earth system tipping points at 1.5°C](#) holds the risk of cascading crises as Earth systems reinforce warming and trigger further tipping points.

At the World Economic Forum's 2023 Annual Meeting, the Earth Commission, Future Earth, and the Global Commons Alliance showcased [never-seen-before research](#), which quantifies five safe and just Earth system boundaries. We are already above the safe levels for four out of five boundaries, and outside just levels for all boundaries – with implications for both the civilization of humans alive today, and the future of life on our planet.

Much work has been done to quantify and qualify the nature of the collapses being experienced across natural habitats and in local communities across the planet.

Shaping our collective response to this crisis is one of the biggest challenges and opportunities of our time. Ramping-up effective communication strategies, inclusive collaboration strategies and approaches to assist public, private and philanthropic decision-makers is a strategic priority if we are to make the critical decisions needed to avoid cascading tipping points.

Yet barriers exist to enabling inclusive and credible collaboration at the scale needed. We are not seeing the scale, speed and quality of action needed to step back from major earth-system tipping points. Yet the long-term consequences of tipping point breaches will affect economies, societies and natural systems for centuries to come.

This is happening due to **three primary barriers: a trauma response** induced on learning of the existential risks unveiled by scientific findings; **siloed thinking** and a lack of access to those from other modes of thought and experience to learn from; and a challenging collaboration environment thanks to persistent **disinformation and misinformation** campaigns.

The opportunity

As mother nature wages one of the most persuasive communications campaigns in history through extreme weather and ecosystem collapse, there is an opportunity for communities of academics and influential societal voices from across geographies, disciplines and generations to learn from each other about how to propel a sustainable revolution that shapes hearts, minds and actions of public-private and philanthropic decision makers worldwide.

The World Economic Forum is convening a community of **world-class nature and climate academics and inspirational voices from across societies, generations and landscapes** to discuss our collective action challenges and how collaboration approaches, innovations and communication tools can better inform public, private and philanthropic decision-makers in support of credible Earth-centred action at scale

The community will be organic in nature, with the spirit and intent of seeding new collaborative opportunities and inspiring divergent thinking.

The Hoffmann Fellow on Visual Technologies will explore the latest tools and technologies available to communicate peer-reviewed science and changes in our natural world in an intuitive and integrated way harnessing geospatial, timelapse and AI technology, with training modules to enable anyone to tell their stories. This work will be focused on how to tell stories that inspires hope, opportunity and networks of trust-based collaboration.

The World Economic Forum, the University of Tokyo and Carnegie Mellon Robotics Institute are looking for a Hoffmann Fellow contributing to this initiative while jointly reporting to the Lead, Academics and Experts at the Centre for Nature and Climate at the World Economic Forum and to the Director, Center for Global Commons at the University of Tokyo.

The role will be based in Tokyo at the Center for Global Commons at the University of Tokyo while jointly working with the World Economic Forum in Geneva and the Robotics Institute at Carnegie Mellon University in Pittsburgh, PA, USA. The Fellow will be expected to travel to and spend time at the Forum office in Geneva as well as at the CREATE Lab, working with our EarthTime programming team in Pittsburgh, PA, USA throughout the two years.

Scope of Engagement

The Fellow will be responsible for:

- Identifying and learning lessons from the latest tools, technologies and communication techniques that enable peer-reviewed science and changes in our natural world to be communicated in an intuitive and integrated way for private, public and philanthropic audiences, for example the [Global Situation Space](#), EarthTime, and [Strategic Intelligence](#) platforms.
- Identifying and updating data layers from within the University of Tokyo and from other top-tier academic and research institutions around the world into [EarthTime](#), to tell the stories of the causes and consequences of our changing planet in the most compelling and credible way. Layer integration will extend from data integration all the way to narrative story co-creation with world-leading experts to show best-case use of data in compelling narratives.
- Supporting the collaboration between the Carnegie Mellon Robotics Institute's CREATE Lab and Open Planet to develop stories that would be most useful for the Global Communities team at the World Economic Forum.
- Supporting the collaboration among Center for Global Commons at U-Tokyo, the Carnegie Mellon University and the World Economic Forum to promote initiatives and activities to safeguard global commons, namely stable and resilient earth system.
- Supporting with the development of training modules to enable anyone in the community (and across the world) to tell their stories, as needed.
- Understanding the needs of Asian audiences to tell their stories, and appropriately adapt the language, visual and content needs of this region into the EarthTime system.

Preferred requirements and experience

Candidates for the Hoffmann Fellowship come from a diversity of disciplinary and social backgrounds – including post docs as well as candidates emerging from MBA's and Law and Engineering Schools

who have a strong interest in collaborating with the Forum. In general, Hoffmann Fellows are at the early stages of their academic career.

The candidate should demonstrate:

- An understanding of the climate crisis and ecosystem collapse
- A creative approach and dynamic thinking, with proven experience and skills in storytelling and/or experience working with large data sets and technology systems that process and communicate information
- A demonstrated interest and/or experience in working on the nexus of technology and policy issues.
- Proven experience engaging in **complex stakeholder consultations** and networked activities across a wide spectrum of cultures.
- Excellent **interpersonal skills**, a proactive and multitasking abilities working both independently and as a member of a team.
- Diplomacy, working with **high-level officials** and executives in a prompt and aligned way, as the Forum shares its work with a global audience.
- An excellent command of **spoken and written English** with experience in communicating complex concepts to non-expert audiences.
- Strong programme and **project management experience**, managing proactively deadlines and deliverables whilst managing change and ambiguity with grace and ease.
- Service-oriented team player with an ability and active **willingness to collaborate** and jointly shape initiatives.
- Willing to work in a **highly demanding environment** and ready to juggle multiple priorities
- Proficient with recent **digital platforms**.

Technical experience

The candidate should have knowledge of infographics, data visualization or data science and data processing techniques, and a strong interest in solving global environmental problems. Especially, the candidate should minimally have experience working with and analyzing data sets relating to climate change and other environmental concerns.

The candidate should minimally be familiar with online mapping tools such as **ArcGIS** or **Mapbox**.

Ideally the candidate will have experience using an online map-based data visualization platform to ingest and analyze data.

Familiarity with handling digital mapping technologies such as GIS and Google Earth Engine or coding skills such as Python is preferred.

The candidate should minimally be experienced with incorporating data visualizations into presentations. Additionally the candidate should be familiar with online visualization platforms (e.g. **EarthTime**, **ArcGIS StoryMaps**, etc) that use map based content for constructing compelling narratives. Ideally the candidate will have experience creating and sharing narrative driven content

using an online map-based visualization platform (e.g. **EarthTime**, **ArcGIS StoryMaps**, etc...) or experience with geospatial studies.

One key selection criteria is related to diversity and inclusion. We do look for excellence, while at the same time, the programme aims to open opportunities for candidates from underrepresented groups and institutions with appropriate skills and experience.

Duration and Location of the Fellowship

- The André Hoffmann Fellowship is two years in duration and Fellows are asked to commit full time to the role.
- The Hoffmann Fellow will be working in collaboration with the Forum, and the academic institutions. Depending on the locations, they will split their time accordingly.
- A successful candidate is aware of these residence requirements and agrees to abide by them.