東京大学未来ビジョン研究センター　グローバル・コモンズ・センター
特任研究員（特定有期雇用教職員）　募集要項

1. 職名及び人数：特任研究員　1 名
2. 契約期間　　：2024 年 4 月 1 日以降のできるだけ早い時期から 2 年間
3. 更新の有無　：無
4. 試用期間　　：採用された日から 14 日間
5. 就業場所　　：未来ビジョン研究センター　グローバル・コモンズ・センター
   （東京都文京区本郷 7-3-1）
6. 業務内容　　：1）本学と世界経済フォーラム（WEF）が共同で行う 2 年間の若手研究者助成制度であるホフマンフェローシップのもと、フェローとして地球環境（グローバル・コモンズ）の危機に関する科学的知見をより直感的かつ説得力を持って社会展開するための視覚化・ストーリー化の手法に関する研究かつ実践を行う。
   2）ひとつの手段として WEF の協力機関であるカーネギーメロン大学ロボティクス研究所と連携し、同研究所の開発したオープンソースの地理空間システム「EarthTime」等を活用することを想定している。
   3）このほか、最新のツールや技術を探求し、誰もがストーリーを理解できるようにするためのトレーニングモジュールの提供など、気候変動、海洋、循環型経済、自然喪失、食糧システムの変革などの課題解決を推進することへの貢献が期待される。
   詳細は添付「André Hoffmann Fellowship Programme Terms of Reference」参照。
7. 就業時間　　：専門業務型裁量労働制により、1 日 7 時間 45 分勤務したものとみなされる。
8. 休日　　　　：土・日、祝日、年末年始（12 月 29 日〜1 月 3 日）
9. 休暇　　　　：年次有給休暇、特別休暇　等
10. 賃金等　　　：年俸制を適用し、業績・成果手当を含め月額 40 万円〜60 万円程度（資格、能力、経験等に応じて決定する）、通勤手当（原則 55,000 円／月まで）
11. 加入保険　　：文部科学省共済組合、雇用保険に加入
12. 応募資格　　：添付「André Hoffmann Fellowship Programme Terms of Reference」の Preferred requirements and experience を参照。
13. 提出書類　　：1）東京大学統一履歴書（以下のサイトからダウンロードし英語で作成）
    https://www.u-tokyo.ac.jp/en/about/jobs.html
    2）ポートフォリオ（論文、発表等の業績リストまたは視覚化・ストーリー化の手法を用いて過去に作成した映像・メディア作品等の紹介、英語で作成）
    3）志望動機・このプロジェクトで貴方が貢献できること（A4 2 枚以内、英語で作成）
    4）貴方について意見を伺える方の連絡先（2 名）
    ※ポートフォリオに WEB 作品の紹介を含む場合は PDF からハイパーリンク可。選考期間中はアクセス可能にしておくこと。
14. 問い合わせ先及び応募書類送付先：
    ・東京大学未来ビジョン研究センター　グローバル・コモンズ・センター事務局
    info.cgc[at]ifi.u-tokyo.ac.jp
    ・上記メールアドレスの[at mark]は@に置き換えてください。 件名を「特任研究員（Hoffmann Fellowship）」とし、提出書類を添付の上、上記メールアドレスに送付すること。1）〜4）いずれもパスワード付きの PDF ファイルで提出し、郵送では提出しないこと。

15. 応募締切 ：2024 年 1 月 8 日 23 時 59 分。書類選考合格者に対し面接（映像・メディア作品がある場合はそのプレゼンテーションを含む）を実施。

16. 募集者名称 ：国立大学法人東京大学

17. 受動喫煙防止措置の状況 ：敷地内禁煙（屋外に喫煙場所あり）

18. その他 ：・取得した個人情報は、本人事選考以外の目的には利用しません。

・「東京大学男女共同参画加速のための宣言（2009.3.3）」に基づき、女性の積極的な応募を歓迎します。

・採用時点で、外国法人、外国政府等と個人として契約している場合や、外国政府等から金銭その他の重大な利益を得ている場合、外為法の定めにより、一定の技術の共有が制限され、結果として本学教職員としての職務の達成が困難となる可能性があります。このような場合、当該契約・利益については、職務に必要な技術の共有に支障のない範囲に留める必要があります。

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

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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.