Postdoctoral researcher, ERC GEOCLOUD project
Aalto University

Job Title	Postdoctoral researcher, ERC GEOCLOUD project
Department	T313 Dept. Computer Science
Institution	Aalto University
	, , Finland
Date Posted	May 30, 2025
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Computer Science
Job Website	https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/Postdoctoral-researcher--ERC-GEOCLOUD-project_R43415

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Job Description

Postdoctoral researcher, ERC GEOCLOUD project

Start date: autumn 2025
Post duration: 3 years in the first instance, with a 1-year extension negotiable
 Applications evaluated on a rolling basis
The Digital Economic Security Lab is recruiting a postdoctoral researcher with a background in politics, law, economics, or related disciplines to work on GEOCLOUD: The Geopolitics of Cloud Computing, a European Research Council Advanced Grant project.
Outsourcing computation to cloud providers can be economically efficient while at the same time generating new systemic risks and dependencies that governments try to manage.
GEOCLOUD is concerned with mapping the changing geography of computational infrastructures and understanding how it is shaped by the interaction of technology companies' business interests and

states' economic and security interests.

The project focuses on Europe and East/Southeast Asia, situated within the broader context of U.S.-China technological rivalry. It aims to contribute to international political economy, security studies, and related fields. The researcher will join a multi-disciplinary team led by Professor Vili Lehdonvirta, consisting of both computer and social scientists.

Principal investigator and community

The project's principal investigator, professor Vili Lehdonvirta, is a Finnish-British sociologist and political economist with a background in computer science. He is the recipient of three European Research Council grants, has served on high-level expert groups at the European Commission, and has published two books on digital economies translated to Japanese, Chinese, and Italian. He holds a dual appointment as Professor of Technology Policy, Department of Computer Science, Aalto University, and Professor of Economic Sociology and Digital Social Research, Oxford Internet Institute, University of Oxford.

The postdoctoral researcher position is part of Professor Lehdonvirta's Aalto-Oxford joint research group, titled the [url=https://diesl.eu/]Digital Economic Security Lab (DIESL). The multidisciplinary lab comprises both social and computer scientists. The lab's joint activities include weekly cross-site virtual seminars, annual in-person workshops in Oxford and Helsinki, and conference trips.

Responsibilities

The postdoctoral researcher will lead a work package in the GEOCLOUD project that focuses on comparative policy analysis. The aim of the work package is to understand how governments attempt to influence the geography of computation through various cloud-relevant policies, and what impact these policies may have.

This involves three related responsibilities:

Documenting and categorizing government cloud policies

The researcher will develop a dataset of government policies that may shape cloud infrastructure in selected jurisdictions, including Northern Europe, East/Southeast Asia, the U.S., and China. Drawing on existing databases (such as the Digital Trade Integration Database and Digital Policy Alert) and additional sources, the postdoc will systematise policy examples into a format suitable for comparative and quantitative analysis. Relevant policy instruments may include cross-border data flow regulations, procurement rules (e.g. 'cloud-first' mandates), tax incentives, infrastructure investments, or designations such as 'trusted cloud'.

Interview-based assessment of policy impacts

The researcher will conduct interviews with key stakeholders in selected countries. These include policy makers and cloud industry professionals. The goal is to assess the perceived and observed effects of government policies on cloud adoption, infrastructure investments, and data centre location decisions.

Contributing to quantitative analysis of policy impacts
The GEOCLOUD project team will use the cloud policy dataset together with infrastructure and usage data developed in other work packages to model how policies influence cloud geography and computational centralization.
Methods may include multiple regression, panel data models, difference-in-differences, and multilevel modeling.
The postdoc will take part in the analysis to test hypotheses on how specific policies (e.g. subsidies, foundry investments, procurement rules) shape outcomes such as data centre presence or market share of local vs. hyperscale solutions. These analyses will contribute to estimating the economic and political trade-offs of digital sovereignty goals.
The role can be adjusted towards qualitative or quantitative research, depending on the profile of the successful candidate. Additional support for data collection and analysis is available, depending on the researcher's methodological focus and needs.
In addition to leading their own work package, the postdoctoral researcher will contribute to the broader GEOCLOUD project by co-authoring publications, guiding junior team members, and engaging in public outreach. They will also play a role in shaping the project's future outputs, such as an open-access "Cloud Observatory" data portal.
Overall, the postdoctoral position requires strong research and teamwork skills, and in return offers excellent career development opportunities, including travel funding, open access publication funding, co-authoring opportunities, graduate supervision opportunities, training courses, access to academic networks in Helsinki, Oxford, and beyond. In particular, Professor Lehdonvirta is keen to support team members in ultimately developing their own ERC Starting Grant applications.
Selection Criteria
Essential selection criteria
Applicants should meet all of the following: * Doctoral degree (or a confirmed defence date) in political science, law, economics, or a related discipline * Strong analytical and academic writing skills, with a publication record or demonstrated potential in relevant fields * Familiarity with a relevant area of digital policy (e.g. data protection regulation, trade policy, infrastructure governance) * Demonstrated interest in the politics of digital infrastructure, cloud computing, or digital sovereignty * Excellent communication and collaboration skills in English * Basic understanding of quantitative methods (e.g. multiple regression)

Additional selection criteria
Applicants should meet some of the following: * Experience with quantitative methods (e.g. multiple regression, panel data models) or mixed-methods research applied to policy-relevant questions. We welcome candidates with advanced skills, but we also encourage applicants with strong potential and a willingness to develop these skills further as part of the project. * Familiarity with key concepts in either digital trade, economic analysis, geoeconomics, or technology policy * Experience conducting and

analysing qualitative interviews * Relevant country expertise and language skills * Prior experience in multi-country or comparative policy research * Familiarity with cloud computing platforms or basic Internet infrastructure concepts (e.g. DNS, routing)

Track record of independent or collaborative publications in journals relevant to international political economy, digital governance, or public administration

Job location

This position is physically based at Aalto's Department of Computer Science, one of the leading computer science research units in northern Europe. The department boasts a history of pioneering contributions to areas such as artificial intelligence and today hosts a growing community of social scientists studying digital technologies. It is situated in the Helsinki area, also home to Nokia, the European Center of Excellence on Countering Hybrid Threats, and a thriving cybersecurity and startup scene. Also located in the area is the Finnish Institute of International Affairs, known among other things for helping to modernize the academic study of geoeconomics.

Helsinki is the capital of Finland, ranked as one of the most innovative countries in the world. Finland is home to Google's and Microsoft's cloud regions as well as Europe's fastest publicly funded supercomputer LUMI. Finland's new European Commission Vice-President Henna Virkkunen is responsible for technological sovereignty, security, and democracy in the European Union. The World Happiness Report 2024 ranked Finland as the world's happiest country for the seventh year running.

Pay and benefits

The salary is approximately €4,000-€4,200 per month, depending on the successful candidate's skills and experience. Benefits include high-quality occupational healthcare, sports facilities, and training courses for supporting professional development. The annual working time is 1612 hours, which enables generous holidays. Support for relocation is available.

How to applySubmit your application via Aalto's online application system. Please include the following attachments:

1. CV
2. A cover letter that includes a point-by-point response to how your profile matches the selection criteria listed above (max. 1,500 words)
3. One writing sample, preferrably single-authored, demonstrating your academic writing skills, not necessarily on a related topic (ideally around 8,000 words)

Applications are evaluated on a rolling basis from 12 June onwards. If your application is shortlisted, you will be contacted to arrange an interview. At that point you will also be asked to provide the contact details of two referees.

Please send any informal queries via email to [url=mailto:vili.lehdonvirta@aalto.fi]vili.lehdonvirta@aalto.fi with the word GEOCLOUD in the subject line. Please note that responses may be delayed.

Related publications

Postdoctoral researcher, ERC GEOCLOUD project
Aalto University

Lehdonvirta, V. Wu, B., and Hawkins, Z. (2024). Weaponized interdependence in a bipolar world: How economic forces and security interests shape the global reach of U.S. and Chinese cloud data centres. Review of International Political Economy.
[url=https://doi.org/10.1080/09692290.2025.2489077L]https://doi.org/10.1080/09692290.2025.2489077
Lehdonvirta, V. Wu, B., and Hawkins, Z. (2024). Compute North vs. Compute South: The Uneven Possibilities of Compute-based AI Governance Around the Globe. 7th AAAI/ACM Conference on AI, Ethics, and Society. San Jose, CA, October 21-23, 2024.
[url=https://doi.org/10.31235/osf.io/8yp7z]https://doi.org/10.31235/osf.io/8yp7z

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Finland