Aalto Open Research Network

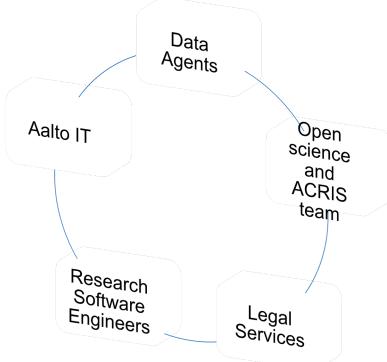
Annual report 2024 19.11.2024



Udayanto Atmojo, Enriqueta Noriega Benitez, Richard Darst, Lara Ejtehadian, Charlotte Forsgård, Hossein Firooz, Enrico Glerean, Dan Häggman, Clemens Icheln, Lucie Hradecká, Mika Jalava, Beatrice Koponen, Tanesh Kumar, Xiaolong Liu, Mikko Mikkola, Laura Mure, Thomas Pfau, Thuy-Linh Phi, Jarno Rantaharju, Jannika Rinnejärvi, Antti Rousi, Teemu Ruokolainen, Eeva Savolainen, Katri Seitsonen, Pedro Silva, Anne Sunikka, Henni Tenhunen, Antti Valkonen, Essi Viitanen, Tian Yu

Aalto Open Research Network

- 14 Data Agents researchers working part-time to advance RDM and OS
- Data Advisor
- 8 RDM&OS Information Specialists in OSA (Open Science and ACRIS team).
- 5 Research Software Engineers
- Legal Counsels, esp. Lawyer of the ethics committee and Lawyer that specializes in OS and copyright
- Aalto IT, esp. the solution owners for RDM services and research infrastructures



Network results for 2023-2024

Action: Reach out to more research personnel who might be unaware of RDM services and don't follow good RDM practices

- 1 Systematic Aalto wide research group visits
 - o RG visits in 2023-2024: 31
- 2 Training and inclusion of RDM info for personnel
 - Our Aalto RDM&OS trainings are consistently revised and receive high amounts of registrations (2023: 31 webinars, 2032 registerations.; 2024: 25 webinars, 2413 registerations)
 - The ethics network were able to make teaching of responsible research mandatory for doctoral students. Enrico and Essi teach at the course
 - Findocnet OS course allows us to further develop 1 ECTS course on OS
 - Data Agents collaborated with legal counsels to provide guidance on research work
 Al, including Al Act

Network results for 2023-2024

Action: Streamline what is seen as too bureaucratic

- Pilot to convert DMP into privacy notice was successful in spring 2024 and continues 2025
- 2. Piloting to use APL for machine actionable DMP functionalities later in 2024 and 2025

Action: Broaden the Data Agent network

1. The Data Agent Network grew with 3 members from 2022

Metrics 2024 - training

	2020	2021	2022	2023	2024
Number of OS&RDM trainings	25	27	31	31	25
Number of registrations to OS&RDM trainings	421	2092	1672	2032	2413
RES OS&RDM YouTube channel views	159	1200	2000	2600	3700
Curriculum embedded RDM training in PhD methodology courses	Data not collected	Data not collected	2	2	2
Number Code Refinery workshops*	4	1	2	3	2
Number of registrations to Code Refinery	207	120	550	0.00	610
workshops*	307	128	559	868	619



^{*=} non-RES initiative, run by Aalto RSEs, funded by NeIC, data from: https://coderefinery.org/about/statistics/

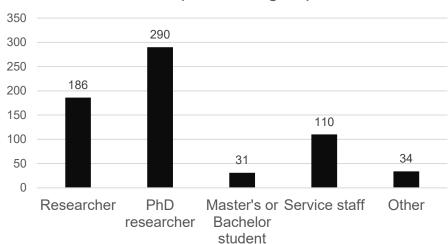
Key metrics 2024 - Training

	Registrations	Aalto registrations	Registrations from other Finnish universities	Other Unite! Universities	Registrations from abroad
2023 Spring	1098	366	307	77	348
2023 Fall	934	463	291	42	141
2023 Total	2032	829	598	119	489
2024 Spring	777	366	283	41	87
2024 Fall	1636	688	409	178	361
2024 Total	2413	1054	692	219	448



Key metrics Fall 2024 – Training – Distribution of Aalto participants*

Fall 2024 Aalto personnel registrations - different personnel groups



*= Not a mandatory field in registration. Some data missing for fall 2024. Participant profile data for 651 registrations of total 688 Aalto registerations for Fall 2024



Metrics 2024 - other support measures

	2020	2021	2022	2023	2024
Feature videos	0	0	0	2	1
Handbooks, guidelines and SOPs	Data not collected	Data not collected	0	2	3
Documented RG visits	Data not collected	Data not collected	4	24	7
researchdata@aalto.fi solved tickets	59	181	180	174	174
researchdata@aalto.fi commented DMPs	Data not collected	72	54	71	77
DMPs to privacy notices pilot	0	0	0	0	5
Number of ACRIS data sets (metadata)	90	158	155	172	173
Number of ACRIS software (metadata)	12	34	43	32	38
Data Hub Data Sources** (total amount)				51	57

^{**}Non-RES initiative, led by Dept. of Finance, data source: https://datahub.aalto.fi/e



Aalto Data Agents Highlights 2024





Credit: Unto Rautio

Udayanto Atmojo (Electrical Engineering and Automation) udayanto.atmojo@aalto.fi

- Administering the Aalto Factory of the Future infrastructure's software repository and consulting in data and software publishing
- Research group visits within the EEA department

Enriqueta Noriega Benitez (Department of Bioproducts and Biosystems) <u>enriqueta.noriegabenitez@aalto.fi</u>

- Work on Handbook of Machine Learning Analysis
- Webinar on Machine Learning Analysis

Richard Darst (Computer Science) <u>richard.darst@aalto.fi</u>

- Running the <u>Aalto Research Software Engineers</u> group: now at 7 staff with continuing data and OS emphasis
- Lead in CodeRefinery training initiative funded by the Nordic E-Infrastructure Collaboration
- Support during and organization of the Scientific Computing garage ("data systems" responsible person)
- Research Software Engineer support focused on data management and research software.

Enrico Glerean (Neuroscience and Biomedical Engineering) enrico.glerean@aalto.fi

- Focus on responsible use of **Al and Al Act: recommendation** page; Al training and useful materials (with Pedro)
- Consultations with handling of personal data, best practices with ethics, and security of research
- External ethics advisor for FAIRCORE4EOSC: midterm report.
- New versions of older trainings (highlight: "how to handle personal data in research" with Anniina and Essi)
- Development of a study curriculum for building AI systems compliant with the GDPR (work for the European Data Protection Board, currently under review).
- "Hands-on Data Protection" workshop with Essi Viitanen.
- Research ethics course with Annukka Jyrämä and Essi Viitanen

Dan Häggman (Built Environment) dan.haggman@aalto.fi

- Started clarification of ENG data management in Aalto internal storage services with department of Mechanical Engineering Work-storage. The aim is to improve data management, governance and access rights in all of ENG. The task is ongoing.
- Consulting/meetings on storage and moving from cloud to on prem TeamWork service with two groups (PIs) in ENG/CE department.
- Participation in Aalto IT Data Governance Task Force renewing recommendations and guidelines for storage in Aalto.
- Participating in ENG data governance pilot started in November 2024

Clemens Icheln (Electronics and Nanoengineering) clemens.lcheln@aalto.fi

- Webinar on publishing research data, and talk at ELE faculty meeting on opening research data
- Research group visits within the ELE department

Mika Jalava (Built Environment) mika.jalava@aalto.fi

- Webinar on reproducible research
- Consulting ITS with research data metadata
- Consulting in data governance and reproducible research at the BE department and co-operating institutions

Tanesh Kumar (Information and Communications Engineering) tanesh.kumar@aalto.fi

Started as a Data Agent in 2023. On leave from the DA program in 2024

Xiaolong Liu (Electronics and Nanoengineering) xiaolong.liu@aalto.fi

- Research group visits within the ELE department
- Individual open data consultant for research group
- Work on metadata of published data sets
- Published 5 datasets in open repository Zenodo

Thuy-Linh Phi (Bioproducts and Biosystems) thuy-linh.phi@aalto.fi

International exchange in Sorbonne University, France

Antti Rousi (Research Services) antti.m.rousi@aalto.fi

- Coordinating the Aalto Open Research Network
- Work with AI assisted conversion of DMPs into privacy notices
- Work with the data management section of APL

Pedro Silva (Chemistry and Materials Science) pedro.silva@aalto.fi

- Open lectures Research Work and AI (with Enrico)
- Work with RDM cheat sheets at CHEM department
- Aalto representative in the DigiMat WS in TU Munich

Henni Tenhunen (Industrial Engineering and Management) henni.tenhunen@aalto.fi

Starts as a Data Agent in 2025

Antti Valkonen (Economics) antti.t.valkonen@aalto.fi

Project manager of Aalto Data Hub

Essi Viitanen (Research services, ARTS) essi.Viitanen@aalto.fi

- Producing the Aalto Open Science prize video and event with Charlotte
- RDM webinars: Intro to RDM, Handling personal data in research, Hands-on Data Protection
- RDM training sessions on handling personal data for doctoral researchers and ITS
- Helping researchers find solutions to RDM questions on a range of topics from best practice recommendations to proper head-scratchers

Aalto Open Research Network. V1.0

Aalto Open Research Network – actions, goals and vision 2025-2026



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AORN actions 2025-2026

Outreach

- RG visits
- Info sessions for Doctoral researchers
- Data management and cleaning clinics
 - School meetings

Streamlining what is perceived as too bureaucratic

- Researcher friendly web content
 - DMPs converted into privacy notices

Training

- Network: Open OS&RDM webinars RSEs: CodeRefinery
- Partaking in mandatory responsible research training for Doctoral Researchers
- 1 ECTS Open science online course (FinDocNet)

Data management planning

- Research group RDM cheat sheets
- Example lifecycles and SOPs for different data types
 - Group specific metadata instructions for published data sets

Supporting RDM tooling and processes

- APL data management planning
- Data storing governance renewal
- Mid-term preservation development
- RDM process development, e.g., support for metadata, value definitions

AORN goals 2025-2026

Aalto fosters a culture of good data practices across all disciplines and all levels of personnel

Help the doctoral pilot project and other stakeholders to succeed with guidelines, SOPs, and even hands-on help when needed

Identify critical gaps in RDM practices

Aalto uses in-house developed and national and regional federated infrastructures to provide world class tools for all research personnel

Vision of the Aalto Open Research Network

Aalto is a leading
European university of
responsible and
sustainable research
and its support and
tooling

This vision supports Aalto's strategic aims of strengthening the clusters of excellence in Aalto's key research areas, helps Aalto to achieve a greater societal responsibility in teaching and continuous learning, and becoming a greater global node of impact

