

Centre for Social Data Science (CSDS)

Annual report for 2022

Edited by Ariel Abeldaño Zuñiga, Mikko Myrskylä, Matti Nelimarkka, Maria Valaste, and Kimmo Vehkalahti



Contents

Introduction	3
The CSDS's aims and current state	4
Support services and infrastructure	4
Work by research groups	5
People	6
Our teaching staff	6
Fellows	6
Professors emeriti	7
Early-career researchers	7
Academic output	8
Social science publications	8
Population studies	8
Methodological and related contributions	10
Conferences and academic events	11
Other achievements	11
Teaching	12
Courses in 2021	12
The 2022 course calendar	12
CSDS connections – alliances and networks	14
The next steps – plans for the coming years	15
Advancing the centre's teaching	15
Infrastructure enhancements	15
Research paths	15
Contacting the centre – how we remain in touch	16
Impressions – 2022 in pictures	17

Introduction

Finland's only research institution dedicated to social data science, the Centre for Social Data Science (CSDS) was established in October 2019 under the umbrella of the University of Helsinki's Faculty of Social Sciences. The year under review was our third full year of operation. Through drawing together statistics, computing, and social-science research, the centre is already making substantial contributions globally.

As part of the worldwide blossoming of social data science, the CSDS stands alongside research centres and degree programmes that have recently emerged from Oxford to Copenhagen, with international impetus extending from the London School of Economics to MIT. The field has thus reached critical mass for groundbreaking advances.

At the heart of social data science is the aim of bringing developments in statistical and machine-learning methodology to bear for tapping under-utilised new sources for data on people and society – such as sensors, registers, social media, and novel digital services – in light of solid social-science concepts and theory. Through these underpinnings, we aim to ensure that the Faculty of Social Sciences and Finland as a whole possess solid expertise for navigating these shifting methodological and data landscapes.

The CSDS's pages at <https://www.helsinki.fi/en/networks/centre-social-data-science> provide an online window to our activities in pursuit of that aim. In sum, we are responding to the rising demand for social data science, which offers rich opportunities for extending enquiry into little-explored aspects of society. Our leadership, proactive approach, and commitment to inclusive development situate us well to contribute decisively to collective advancement, particularly in the face of adversity and a pressing need for collaborative efforts.

The CSDS's aims and current state

We cultivate data-intensive quantitative methods for a social-science-anchored response to the datafication and digitalisation of society.

Courses for master's and PhD students

Teaching forms one pillar of this endeavour. For postgraduate students, our participation in the Master's Programme in Contemporary Societies (COS) has brought into being Finland's most methods-focused social-science programme, considerably expanding what the University of Helsinki can offer. Learning about 'data-wrangling', programming, proper survey design, and causal relations equips students with skills for working in this data-rich world. Social Data Science enrolment figures demonstrate that students recognise this potential.

For PhD students, courses such as Introduction to Open Data Science (with approx. 100 doctoral students each year) and the Helsinki Summer Institute in Computational Social Science – a node in an international summer programme in computational social science – make the latest methodological developments available to support their research. In addition, the centre and associated fellows jointly organise a set of courses centred on digitalisation.

Our expertise in grappling with today's data-intensive and digital world benefits research, both via the teaching and more directly. The centre stands at the forefront of demographic research especially, giving us a strong vantage point on emerging work in the realms of social media and survey methods employing textual analysis. Our research projects are highly collaborative: we engage with other disciplines within the faculty (with publishing that involves sociology, social policy, etc.) while internationally renowned demographers and media/communication researchers are among our partners in the wider arena. Our efforts at the same time lubricate research funding. Alongside fruitful proposals for individual- and international-level projects, this has nurtured crucial methodology expertise faculty-wide through co-authorship of successful grant applications.

Support services and infrastructure

Propelling such work into the future requires suitable robust infrastructure. We are preparing frameworks for image labelling (supported by the C. V. Åkerlund media foundation) and text analysis in surveys (with DARIAH). The aim behind both systems is to support scholars in handling ballooning volumes of data. Engaging with DARIAH connects the centre and the faculty as a whole in the web of national development for humanities and social-science research infrastructure (FIRI). Meanwhile, the centre already provides hosting for services such as LimeSurvey for the university community.

From the human perspective, we offer guidance in methods for PhD students, postdoctoral researchers, and the faculty's staff, with a weekly methods clinic arranged in collaboration with the Helsinki Institute for Social Sciences and Humanities (HSSH). This counselling, an outgrowth of the open Friday Coffee that we held at the CSDS's inception, the clinic provides an environment for discussing thorny methodological challenges with experts and peers alike, in aims of resolving them and providing a route forward. Also, 2022 saw us experiment with method-oriented support tailored for research proposals, proceeding from a conviction that any truly advanced methods of data-intensive scholarship must be planned well from the research-proposal stage onward.

Endeavours in this field necessitate considerable heavy lifting on the methodological front. To distribute the burden and benefit from broader input, we are developing ways of involving master's students in this facet of research projects. In 2022, we conducted our first call for trainees, offering positions for our own students but also the faculty's collaborators and external stakeholders. The goal is to support the projects via hands-on experience while affording the students an opportunity to advance toward a well-completed thesis and timely graduation.

Work by research groups

Our research activities are arranged under research groups, with three foci: demography, social computing, and a good digital society.

Demographers at CSDS study population dynamics, with special attention given to fertility and mortality forecasting, family formation/dissolution, and demographic processes' inequalities and flows. The team works in and with the Population Research Unit, also collaborates extensively with the Max Planck Institute for Demographic Research.

The Helsinki Social Computing Group emphasises two distinct areas of social computing: 1) collaborative, social, and societal use of digital services – social media and beyond – and 2) well-grounded development of design-based approaches, digital methods, and computation-based techniques for the social sciences, with particular regard to matters of validity, reliability, and methodological operationalisation of social-science theory. We reached a concrete milestone in 2022 with Kone Foundation sponsoring a project (on Twitter lobbying) with communications scholar Dr Juho Vesa to which we are contributing methodological know-how and reflection.

Finally, **the centre's Digital Social Science Research Group** examines a digitalising society, homing in on its structures and processes while not neglecting the human experiences bound up with this. The group's core aim is to explore the open-ended possibilities for collaboratively developing a good society for all in the digital age. In 2022, we implemented a broad-based crowdsourcing project in the Faculty of Social Sciences to develop a corresponding code of conduct.

People

Behind the CSDS's ambitious efforts are its people, from permanent staff to the students who step up to the challenge of digital engagement with us.

Our teaching staff

The centre's main research efforts are rooted in the expertise and enthusiasm of the following faculty members:

Centre director **Matti Nelimarkka**, University Lecturer in Computational Social Science

The CSDS's deputy director, **Maria Valaste**, University Lecturer in Social Data Science

Krista Lagus, Professor of Digital Social Science

Mikko Myrskylä, Professor of Social Data Science

Kimmo Vehkalahti, Senior University Lecturer in Social Data Science

Ariel Abeldaño Zuñiga, University Lecturer in Social Data Science (joining us in 2023)

Fellows

Working alongside them are many enthusiastic fellows with the centre, who maintain strong connections and engagements with other institutions, in academia and industry:

Management and organisation expert **Catarina Ahlvik**, an affiliated researcher with Hanken School of Economics

Assistant Professor **Daria Gritsenko**, with the Aleksanteri Institute – Finland's centre for Russian and East European studies

University Researcher **Ilja Kavonius**, with the Centre for Consumer Society Research

Hanna Konttinen, Senior University Lecturer in Social Psychology

Riikka Koulu, Associate Professor of Law and Digitalisation

University Researcher **Salla-Maaria Laaksonen**, with the Centre for Consumer Society Research

Krister Lindén, Research Director (Digital Humanities)

Eetu Mäkelä, Associate Professor of Digital Humanities

Minna Ruckenstein, Associate Professor (Centre for Consumer Society Research)

Professor **Karri Silventoinen**, a demographer with the Population Research Unit

Focusing on register studies, Professor **Reijo Sund**, of the University of Eastern Finland

Mikko Tolonen, Associate Professor of Digital Humanities

Julia Velkova, Assistant Professor of Technology and Social Change, at Sweden's Linköping University

Laszlo Vincze, University Lecturer, Swedish School of Social Science (focusing on quantitative methods)

Professors emeriti

Distinguished colleagues with a rich tapestry of contributions give further valuable input to the work. Among them are **Juha Alho** and **Risto Lehtonen**, both luminaries in the field of social statistics, and the statistics experts **Seppo Mustonen**, **Hannu Niemi**, and **Lauri Tarkkonen**.

Early-career researchers

At the other end of the spectrum are researchers nearer the beginning of their career. The following scholars eagerly embarking on their journey are among those who bring a wealth of new ideas to the centre's undertakings:

Research Assistant **Sanni Saarinen**

Doctoral Researcher **Riku Laine**

Doctoral Researcher **Maria Ponkilainen**

Postdoctoral Researcher **Sanna Kailaheimo-Lönnqvist**

Doctoral Researcher **Julia Hellstrand**

Postdoctoral Researcher **Kelsey Wright**

Postdoctoral Researcher **Ziwei Rao**

Doctoral Researcher **Citlali Trigos-Raczkowski**

Doctoral Researcher **Donata Stonkute**

Doctoral Researcher **Miika Mäki**

Doctoral Researcher **Ricarda Duerst**

Postdoctoral Scholar **Jesse Haapoja**

Doctoral Researcher **Anton Berg**

Doctoral Researcher **Robin Forsberg**

Doctoral Researcher **Anastasiia Volkova**

Academic output

The core staff of the CSDS produced 33 major scientific publications: 19 peer-reviewed journal articles or book chapters, two books, and 12 other pieces (conference papers, working papers, and datasets) in the year under review. The works listed below constitute the full set of these academic publications from 2022.

Social science publications

We produced the following publications directly addressing social science in 2022:

Komp-Leukkunen, K., & **Lagus, K.** (2022). Sosiaalityöiden tiedon avoin saatavuus: Haasteita ja ratkaisuja. *Janus: sosiaalipolitiikan ja sosiaalityön tutkimuksen aikakauslehti*, 30(3), 296–301.

Laaksonen, S.-M., Hokka, J., **Nelimarkka, M.**, & Nikunen, K. (2022). Affective visual rhetoric of the far-right across social media. In K. Pettersson & E. Nortio (eds), *The Far-Right Discourse of Multiculturalism in Intergroup Interactions* (part of the Studies in Discursive Psychology series) (1st ed.), pp. 189–216. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-89066-7_8

Schwartz, S.A., **Nelimarkka, M.**, & Larsson, A.O. (2022). Populist platform strategies: A comparative study of social media campaigning by Nordic right-wing populist parties. *Information, Communication & Society*. <https://doi.org/10.1080/1369118X.2022.2147397>

Argyle, L.P., Terman, R., & **Nelimarkka, M.** (2022). Religious freedom in the city pool: Gender segregation, partisanship, and the construction of symbolic boundaries. *Politics and Religion*, 15(4), 700–721. <https://doi.org/10.1017/S1755048322000086>

Van Bavel, J.J., Cichocka, A., Capraro, V., Sjästad, H., Nezlek, J.B., Pavlović, T., ... **Berg, A.**, ... & Jørgensen, F.J. (2022). National identity predicts public health support during a global pandemic. *Nature Communications*, 13(1), Paper 517.

Rydenfelt, H., Haapanen, L., **Haapoja, J.**, & Lehtiniemi, T. (2022). Personalisation in Journalism: Ethical insights and blindspots in Finnish legacy media. *Journalism*. <https://doi.org/10.1177/14648849221138424>

Population studies

Several of the publications report on population studies and associated projects:

Mehta, N., & **Myrskylä, M.** (2022). An introduction to the supplemental issue on Why Does Health in the US Continue to Lag Behind. *Journals of Gerontology – Series B: Psychological Sciences & Social Sciences*, 77 (Supp. 2), S113–S116. <https://doi.org/10.1093/geronb/gbac050>

Campisi, N., Kulu, H., Mikolaj, J., Kluesener, S., & **Myrskylä, M.** (2022). A spatial perspective on the unexpected Nordic fertility decline: The relevance of economic and social contexts. *Applied Spatial Analysis and Policy*, 16(1). <https://doi.org/10.1007/s12061-022-09467-x>

Acosta, E., Mehta, N., **Myrskylä, M.**, & Ebeling, M. (2022). Cardiovascular mortality gap between the United States and other high life expectancy countries in 2000–2016. *Journals of Gerontology – Series B: Psychological Sciences & Social Sciences*, 77 (Supp. 2), S148–S157. <https://doi.org/10.1093/geronb/gbac032>

Batyra, E., Leone, T., & **Myrskylä, M.** (2022). Forecasting of cohort fertility by educational level in countries with limited data availability: The case of Brazil. *Population Studies*, 77(2), 179–195. <https://doi.org/10.1080/00324728.2022.2104916>

Laine, R., Myrskylä, M., Kaskela, T., & Pitkänen, T. (2022). Imprisonment, community sanctions and mortality by cause of death among patients with substance use disorder – a 28-year follow-up using Finnish register data. *Drug and Alcohol Dependence*, 232, Paper 109327. <https://doi.org/10.1016/j.drugalcdep.2022.109327>

Torres, A.F.C., Batyra, E., & **Myrskylä, M.** (2022). Income inequality and increasing dispersion of the transition to first birth in the Global South. *Population and Development Review*, 48(1), 189–215. <https://doi.org/10.1111/padr.12451>

Hellstrand, J.I.S., Nisén, J., & **Myrskylä, M.** (2022). Less partnering, less children, or both? Analysis of the drivers of first birth decline in Finland since 2010. *European Journal of Population*, 38(2), 191–221. <https://doi.org/10.1007/s10680-022-09605-8>

Aradhya, S., Tegunimataka, A., Kravdal, O., Martikainen, P., **Myrskylä, M.,** Barclay, K., & Goisis, A. (2022). Maternal age and the risk of low birthweight and pre-term delivery: A pan-Nordic comparison. *International Journal of Epidemiology*, 52(1), 156–164. <https://doi.org/10.1093/ije/dyab211>

Goisis, A., Palma, M., Metsä-Simola, N., Klemetti, R., Martikainen, P., **Myrskylä, M.,** Pelikh, A., Tosi, M., & Remes, H. (2022). Medically assisted reproduction and mental health: A 24-year longitudinal analysis using Finnish register data. *American Journal of Obstetrics and Gynecology*, 228(3). <https://doi.org/10.1016/j.ajog.2022.10.041>

Pelikh, A., Smith, K.R., **Myrskylä, M.,** & Goisis, A. (2022). Medically assisted reproduction treatment types and birth outcomes: A between-family and within-family analysis. *Obstetrics and Gynecology*, 139(2), 211–222. <https://doi.org/10.1097/AOG.0000000000004655>

Baranowska-Rataj, A., Barclay, K., Costa-Font, J., **Myrskylä, M.,** & Özcan, B. (2023; accepted in 2022 for publication). Preterm births and educational disadvantage: Heterogeneous effects. *Population Studies*, 77(3), 459–474.

Gültzow, M., Bijlsma, M.F., van Lenthe, F.J., & **Myrskylä, M.** (2022). The contribution of health behaviors to depression risk across birth cohorts. *Epidemiology*, 33(6), 880–889. <https://doi.org/10.1097/EDE.0000000000001524>

Nisén, J., Bijlsma, M. J., Martikainen, P., Wilson, B., & **Myrskylä, M.** (2022). The gendered impacts of delayed parenthood: A dynamic analysis of young adulthood. *Advances in Life Course Research*, 53, Paper 100496. <https://doi.org/10.1016/j.alcr.2022.100496>

Loi, S., Li, P., & **Myrskylä, M.** (2022). At the intersection of adverse life course pathways: The effects on health by nativity (MPIDR Working Paper 2022-018). Max Planck Institute for Demographic Research. <https://doi.org/10.4054/MPIDR-WP-2022-018>

Sharma, S., Hale, J.M., **Myrskylä, M.,** & Kulu, H. (2022). Disparities in the population burden of joint cognitive and physical impairment in the US, 1998–2016 (MPIDR Working Paper 2022-

001). Max Planck Institute for Demographic Research. <https://doi.org/10.4054/MPIDR-WP-2022-001>

Ponkilainen, M., Einiö, E., Pietiläinen, M., & **Myrskylä, M.** (2022). Educational differences in fertility among female same-sex couples (MPIDR Working Paper 2022-030). Max Planck Institute for Demographic Research. <https://doi.org/10.4054/MPIDR-WP-2022-030>

Hellstrand, J., Nisén, J., & **Myrskylä, M.** (2022). Educational field, economic uncertainty, and fertility decline in Finland in 2010–2019 (MPIDR Working Paper 2022-022). Max Planck Institute for Demographic Research. <https://doi.org/10.4054/MPIDR-WP-2022-022>

Anastasia, L., Keenan, K., **Myrskylä, M.**, & Kulu, H. (2022). Multimorbid life expectancy across race, socioeconomic status, and gender in South Africa (MPIDR Working Paper). Max Planck Institute for Demographic Research.

Todd, N., & **Myrskylä, M.** (2022). Projection of US adult obesity trends based on individual BMI trajectories (MPIDR Working Paper 2022-034). Max Planck Institute for Demographic Research. <https://www.demogr.mpg.de/papers/working/wp-2022-034.pdf>

Mäki, M., Hägglund, A.E., Rotkirch, A., Kulathinal, S., & **Myrskylä, M.** (2022). Stable marital histories predict happiness and health across educational groups (MPIDR Working Paper 2022-035). Max Planck Institute for Demographic Research. <https://www.demogr.mpg.de/papers/working/wp-2022-035.pdf>

Hale, J.M., Schneider, D.C., Mehta, N.K., & **Myrskylä, M.** (2022). Understanding cognitive impairment in the U.S. through the lenses of intersectionality and (un)conditional cumulative (dis)advantage (MPIDR Working Paper 2022-029). Max Planck Institute for Demographic Research. <https://doi.org/10.4054/MPIDR-WP-2022-029>

van Raalte, A.A., Basellini, U., Camarda, C.G., Nepomuceno, M.R., & **Myrskylä, M.** (2022). The dangers of drawing cohort profiles from period data: A research note. SocArXiv. <https://doi.org/10.31235/osf.io/frkcw>

Methodological and related contributions

The following pieces by us constitute contributions to the methodological landscape in 2022:

Nelimarkka, M. (2022). *Computational Thinking and Social Science: Combining Programming, Methodologies and Fundamental Concepts*. SAGE Publications. <https://uk.sagepub.com/en-gb/eur/computational-thinking-and-social-science/book268542>

Lagus, K., & **Valaste, M.** (2022). Qualitative survey data (presentation at the BNU Workshop on Survey Statistics 2022, in Tartu, Estonia).

Laine, K., **Litova, M.**, & **Oikarinen, T.** (2022). Crowdsourcing [a] social wellbeing non-probability survey (presentation at the BNU Workshop on Survey Statistics 2022, in Tartu, Estonia).

Lennes, M., Kovanen, S.E., Matthiesen, M., **Lagus, K.**, **Valaste, M.**, & Laippala, V. (2022). WP 2.1: Social Data Science (poster-session presentation at the FIN-CLARIAH kick-off seminar in Helsinki).

Vehkalahti, K. (2022). Valtsikan tilastotieteen vaiheita ja muotoja: opiskelijan/opettajan näkökulmia & muistikuvia yliopiston muutoksista (no. 227 in the series 'Valtiotieteellisen tiedekunnan julkaisuja'). University of Helsinki political-science programme.
<https://doi.org/10.31885/9789515170866>

Conferences and academic events

The CSDS was instrumental in organising several landmark seminars and other events in its field. Principally, in collaboration with the Baltic–Nordic–Ukrainian Network on Survey Statistics (BNU), it hosted the Workshop on Survey Statistics 2022 on 23–26 August, in Tartu, Estonia, arranging this as a hybrid event meshing with a digital focus. In total, roughly 90 participants registered for the event, with most attending in person. The centre supported other organisation efforts, and the year also saw our staff begin the planning for the upcoming 6th Baltic-Nordic Conference on Survey Statistics, scheduled to be held in 2023 in Helsinki.

Other achievements

Maria Valaste, Krista Lagus, and Matti Nelimarkka received the annual achievement award from the faculty for their work in in developing code of conduct and infrastructure work.

Anton Berg, Jesse Haapoja and Matti Nelimarkka received a goodie basket as a thank for submitting an innovation report detailing a new idea for greener ICT. It was the only innovation report submitted from the city centre campus for the call for innovations. Sadly, we did not pursue to develop IPR on this as prior art was found.

Teaching

Courses in 2021

In our annual report for 2021, we inadvertently reported the courses held in the 2020–2021 academic year instead of those for the calendar year 2021. With the reporting for 2022, we return to our original practice of following the calendar-year method, as applied for the 2020 report. Accordingly, we also list the courses from autumn 2021 below, to avoid a gap in the chronicle provided by the annual reports.

Intensive-study period (30 Aug. – 5 Sept. 2021):

- SOST-943, 'Qualitative Research and Computers' (Matti Nelimarkka), online course with self-paced independent study (2–5 units) over 15.3–5.9.2021
- SOST-932, 'Data Science' (Matti Nelimarkka)
- VALT-103, 'Johdatus yhteiskuntatilastotieteeseen, osa 1, MOOC' (Kimmo Vehkalahti), held on 1.9–31.12.2021
- VALT-104, 'Johdatus yhteiskuntatilastotieteeseen, osa 2, MOOC' (1.9–31.12.2021) (Kimmo Vehkalahti)

Term 1 (6 Sept. – 24 Oct. 2021):

- COS-SD301, 'Key Concepts in Social Data Science' (CSDS staff)
- COS-D419, 'Factor Analysis and Structural Equation Models' (Kimmo Vehkalahti)
- SOST-9151, 'Social Data Science PhD Seminar I+II' (CSDS staff)
- COS-R405, 'Quantitative Research Skills' (Hanna Konttinen)
- GPC-O317, 'Digital Politics and Policy' (Daria Gritsenko)
- ICE-303, 'Big Data: Quantitative, Critical, and Mixed Methodologies' (Daria Gritsenko)

Term 2 (1 Nov. – 19 Dec. 2021):

- COS-D407, 'Scientific Modeling and Model Validation' (Christina Bohk-Ewald)
- COS-D422, 'Scientific Modeling and Model Validation, Advanced' (Christina Bohk-Ewald)
- COS-D421, 'The Political in Human–Computer Interaction' (Matti Nelimarkka)
- SOST-9151, 'Social Data Science PhD Seminar I+II' (CSDS staff)
- COS-D405, 'Digital Inequalities and the Ethical Turn' (Minna Ruckenstein)
- COS-R406, 'Quantitative Research Practicum' (Hanna Konttinen)
- PHD-302, 'Introduction to Open Data Science' (Kimmo Vehkalahti)

The 2022 course calendar

The following lists cover the courses during the 2022 **calendar year**.

Intensive-study period (3–16 Jan. 2022):

- SOSM-328, 'Challenges of Globalisation, Sustainable Development and Changing Society to the Measurement of Economies and Welfare' (Ilja Kavonius)
- VALT-103, 'Johdatus yhteiskuntatilastotieteeseen, osa 1, MOOC' (3.1–30.4.2022) (Kimmo Vehkalahti)

- VALT-104, 'Johdatus yhteiskuntatilastotieteeseen, osa 2, MOOC' (3.1–30.4.2022) (Kimmo Vehkalahti)

Term 3 (17 Jan. – 6 Mar. 2022):

- COS-SD311, 'Master's Thesis Seminar in Social Data Science I' (CSDS staff)
- COS-D411, 'Data Wrangling and Analysis' (Maria Valaste)
- SOST-9151, 'Social Data Science PhD Seminar I+II' (CSDS staff)
- SOSM-326, 'Datafication – Critical Perspectives' (Minna Ruckenstein)

Term 4 (14 Mar. – 8 May 2022):

- COS-SD311, 'Master's Thesis Seminar in Social Data Science I' (CSDS staff)
- COS-SD302, 'Perspectives to Digitalizing Society' (Krista Lagus)
- COS-D415, 'Survey Methodology' (Maria Valaste)
- SOST-9151, 'Social Data Science PhD Seminar I+II' (CSDS staff)
- VALT-103, 'Johdatus yhteiskuntatilastotieteeseen, osa 1, MOOC' (1.5–31.8.2022) (Kimmo Vehkalahti)
- VALT-104, 'Johdatus yhteiskuntatilastotieteeseen, osa 2, MOOC' (1.5–31.8.2022) (Kimmo Vehkalahti)

Intensive-study period (9–31 May 2022):

- COS-D406, 'Causality' (Mikko Myrskylä)
- COS-D401, 'Introduction to the Framework of Economic Statistics' (Ilja Kavonius)
- COS-R409, 'Quantitative Methods for Policy Evaluation' (Michele Cantarella)

Summer 2022:

- SICSS, 'Summer Institute in Computational Social Science' (Matti Nelimarkka)

Intensive-study period (29 Aug. – 4 Sept. 2022):

- VALT-103, 'Johdatus yhteiskuntatilastotieteeseen, osa 1, MOOC' (1.9–31.12.2022) (Kimmo Vehkalahti)
- VALT-104, 'Johdatus yhteiskuntatilastotieteeseen, osa 2, MOOC' (1.9–31.12.2022) (Kimmo Vehkalahti)

Term 1 (5 Sept. – 23 Oct. 2022):

- COS-SD301, 'Key Concepts in Social Data Science' (CSDS staff)
- COS-SD312, 'Master's Thesis Seminar in Social Data Science II' (CSDS staff)
- COS-R405, 'Quantitative Research Skills' (Kimmo Vehkalahti)
- COS-D411, 'Data Wrangling and Analysis' (Maria Valaste)
- GPC-O317, 'Digital Politics and Policy' (Daria Gritsenko)
- ICE-303, 'Big Data: Quantitative, Critical, and Mixed Methodologies' (Daria Gritsenko)
- SOST-9151, 'Social Data Science PhD Seminar I+II' (CSDS staff)

Term 2 (31 Oct. – 18 Dec. 2022):

- COS-SD312, 'Master's Thesis Seminar in Social Data Science II' (CSDS staff)
- SOST-930, 'Programming for Social Sciences' (Joni Oksanen)

- COS-D407, 'Scientific Modelling and Model Validation' (Riku Laine)
- COS-D405, 'Digital Inequalities and the Ethical Turn' (Tuukka Lehtiniemi)
- PHD-302, 'Introduction to Open Data Science' (Kimmo Vehkalahti)
- SOST-9151, 'Social Data Science PhD Seminar I+II' (CSDS staff)

Listings of CSDS course offerings are provided also via two extensive Web sites managed by the Helsinki Institute for Social Sciences and Humanities, under

- Methods courses at the University of Helsinki –
<https://www.helsinki.fi/en/helsinki-institute-social-sciences-and-humanities/methods-courses-university-helsinki>
- Datafication courses at the university –
<https://www.helsinki.fi/en/helsinki-institute-social-sciences-and-humanities/datafication-courses-university-helsinki>

CSDS connections – alliances and networks

The CSDS has alliances in place with research centres, both within Finland and based elsewhere in Europe, and domestic government organisations. The following entities stand out among the centre's partners in ongoing co-operation:

Internationally

- The European Master of Official Statistics (EMOS) programme
- The Baltic–Nordic–Ukrainian Network on Survey Statistics
- The International Association for Statistical Education (IASE)
- The International Statistical Literacy Project (ISLP)
- The Max Planck Institute for Demographic Research

At the University of Helsinki

- The Centre for Consumer Society Research
- The Helsinki Centre for Digital Humanities (HELDIG)
- Helsinki Centre for Data Science (HiDATA)
- The Helsinki Institute for Social Sciences and Humanities
- Finnish Center for Artificial Intelligence (FCAI)

Throughout Finnish society

- The Finnish Institute for Health and Welfare
- The Finnish Institute of Occupational Health
- The Social Insurance Institution of Finland (Kela)
- Statistics Finland

The next steps – plans for the coming years

Advancing the centre's teaching

We continually refine our **teaching** such that it maintains pace with a rapidly evolving methodological landscape. In particular, the CSDS constantly ensures that Contemporary Societies remains the most methodology-oriented master's programme in Finland and on par with counterparts in the other Nordic countries. With these constellations of expertise and development, alongside selected methods courses open at doctoral-studies level, we further build the faculty's capacity to reap the most value from developments in data science.

Infrastructure enhancements

In Finland's development of **infrastructure**, the focus at universities and beyond has been on investing in a large-scale development process. Needs identified as specific to the Faculty of Social Sciences align broadly with infrastructure-enhancement areas such as

- Register-based data sources for social science, including interfaces with Statistics Finland and other official registers
- Solid frameworks for survey-oriented research – in particular, platforms supporting collaboration with national and international research communities
- Software systems for security-assured automatic transcription of interview materials
- Platforms and services that enhance collection of social-media and other digital data, with special attention to recent and impending changes in the regulatory landscape

The centre strives to be closely involved in these efforts – for instance, within the lines of the continuing DARIAH infrastructure work. In addition, we join new collaboration webs in this area whenever possible, even establishing new ones where none yet exist.

Research paths

Operating at the intersection of statistics, computing, and the social sciences, the Centre for Social Data Science is uniquely positioned to furnish opportunities for data-intensive research able to address the key questions in social science through development and application of novel yet solidly grounded methods. Our continued strides toward a guaranteed standing as an internationally renowned research environment include steps such as these:

- Consolidating and expanding research collaboration with partners within and beyond the university
- Demonstrating academic excellence in social data science, nationally and internationally
- Maintaining close connections among the research groups at the centre
- Developing new dimensions of research, partly through attracting early-career researchers by means of competitive funding
- Offering methodological support to researchers at any stage in their career

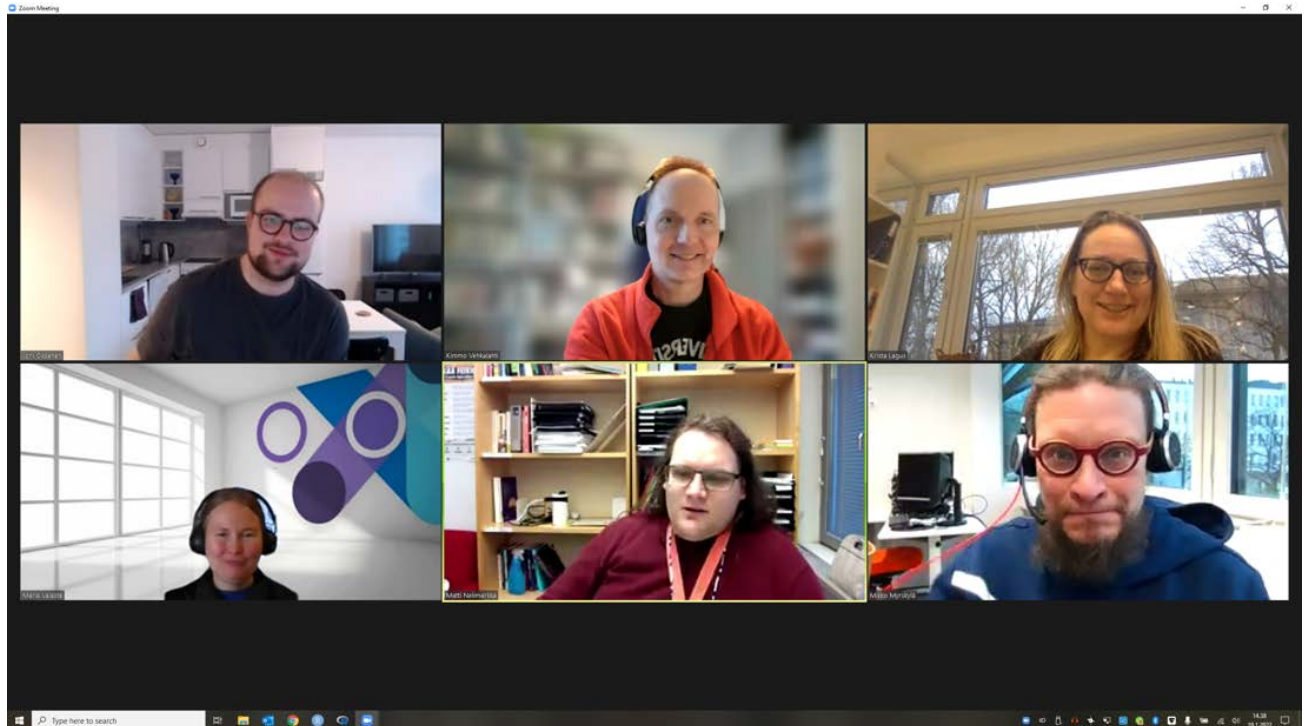
Contacting the centre – how we remain in touch

Openness extends in both directions: in parallel with its outreach work, the CSDS strives for accessibility. The team can be contacted in person on its physical premises, on floor 3 of the University of Helsinki's building at Unioninkatu 35 in central Helsinki. In parallel, the centre's Web site, at <https://www.helsinki.fi/en/networks/centre-social-data-science>, provides up-to-date information about both regular and special upcoming events.

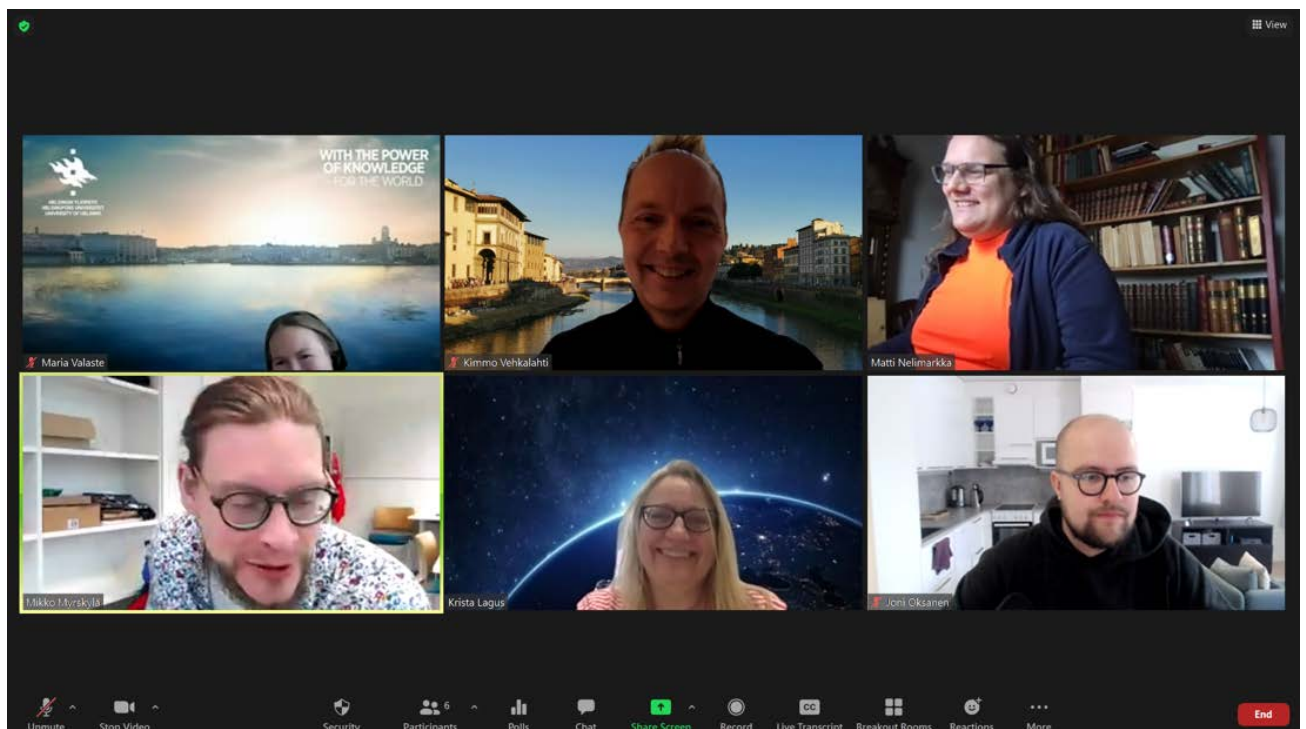
We can be reached also by means of the University of Helsinki's Web pages or by direct e-mail to the centre's core personnel:

- Matti Nelimarkka: matti.nelimarkka@helsinki.fi
- Maria Valaste: maria.valaste@helsinki.fi
- Krista Lagus: krista.lagus@helsinki.fi
- Mikko Myrskylä: mikko.myrskylä@helsinki.fi
- Kimmo Vehkalahti: kimmo.vehkalahti@helsinki.fi
- Ariel Abeldaño Zuñiga: ariel.abeldanozuniga@helsinki.fi

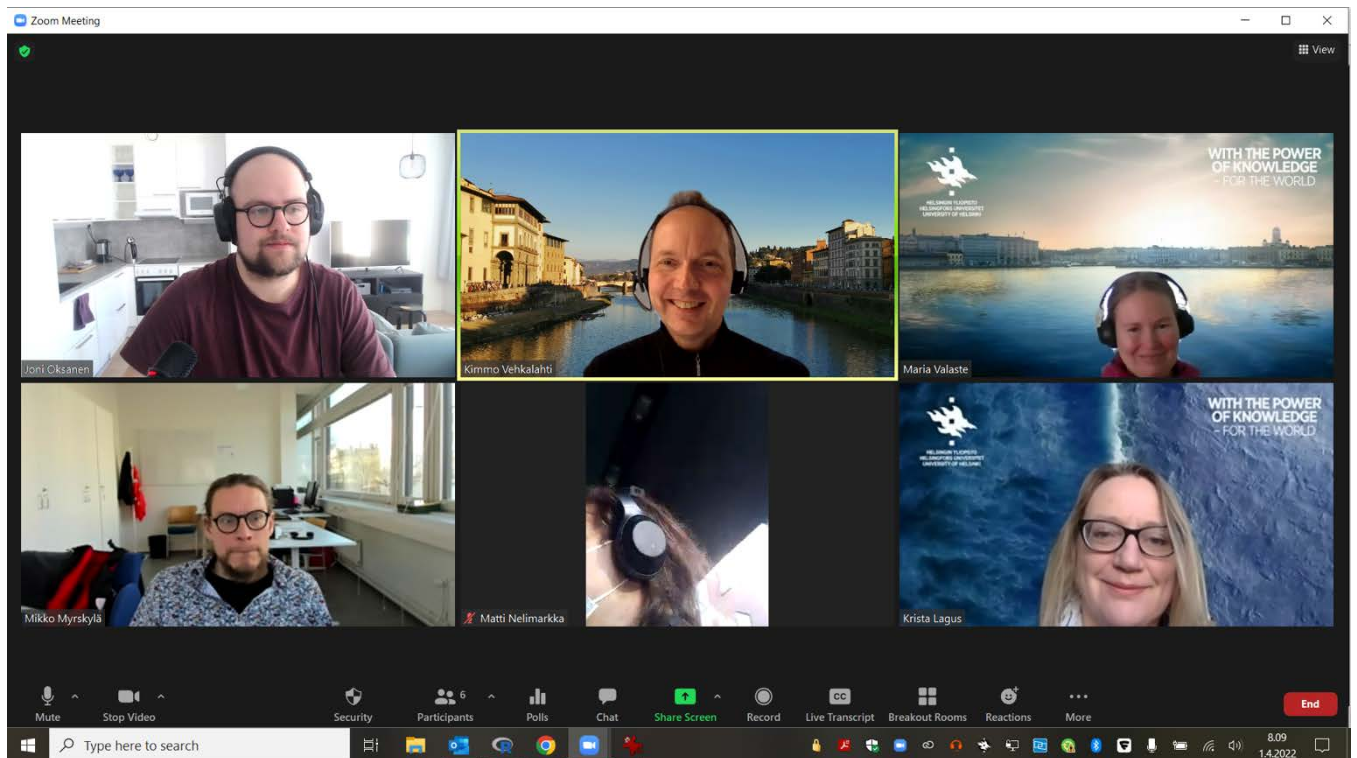
Impressions – 2022 in pictures



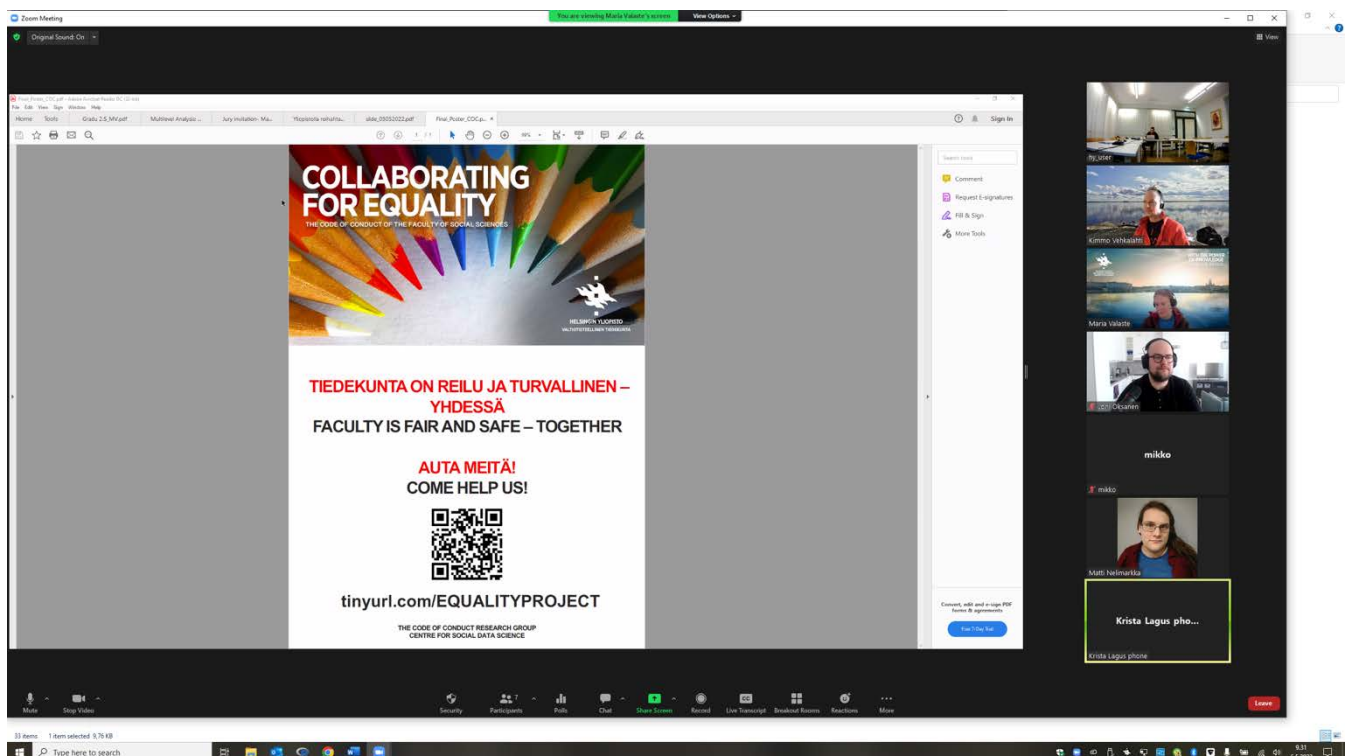
One of our digital tools: a Zoom-assisted coffee break on 19 January (amid the SARS-CoV-2 pandemic).



The morning meet-up on 2 March, held via Zoom, while Kimmo was on research leave in Florence, Italy.



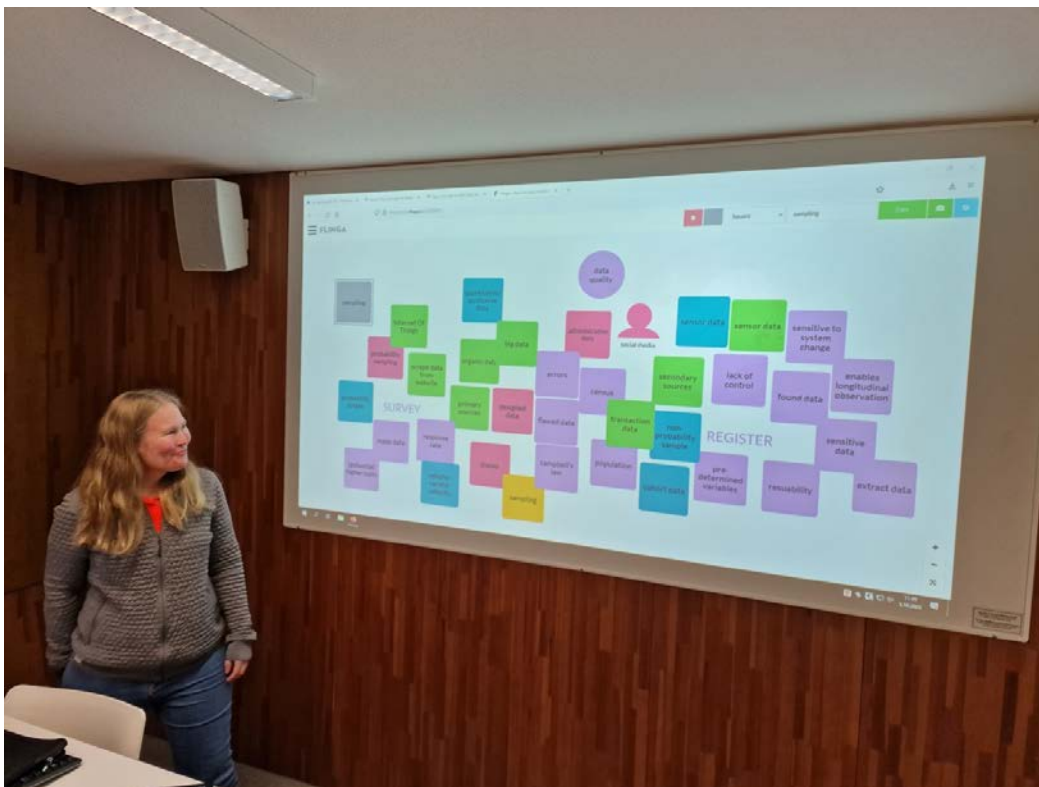
The morning meeting on 1st April (still over Zoom and with Kimmo being in Florence).



Discussion of the code-of-conduct crowdsourcing project, in progress on 6 May.



Several students, faculty members, and close colleagues make a relaxed trip to the nearby island of Lonna on 29 June.



Brainstorming with 'cohort #2' on the content of their Key Concepts course in October.



Joni Oksanen and other staff on the centre's premises as our winter season began, on 9 December.



The faculty's holiday party at Wanha Satama, with our staff and research assistants, on 15 December.



Receiving a prize from the faculty in connection with the crowdsourcing project, on 15th December.



Krista speaking after accepting the prize on the centre's behalf.