

ALEKSANDRA URMAN

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EMPLOYMENT

Postdoctoral researcher Social Computing Group (Department of Informatics) University of Zurich	<i>Since September 2020</i>
Postdoctoral researcher Institute of Communication and Media Studies University of Bern	<i>July 2020 - June 2021</i>
Research assistant Institute of Communication and Media Studies University of Bern	<i>June 2018 - June 2020</i>

EDUCATION

PhD (summa cum laude) Institute of Communication and Media Studies University of Bern <u>Dissertation Title: "Polarisation on Social Media in Different National Contexts"</u> Supervisor: Prof. Dr. Silke Adam; Second Reviewer: Prof. Dr. Peter Van Aelst	<i>June 2018- May 2020</i>
MA in Political Science Central European University, Budapest	<i>2016-2017</i>
BA in Asian Studies Higher School of Economics, Moscow	<i>2012-2016</i>

PEER-REVIEWED PUBLICATIONS

1. *Urman, A., Makhortykh, M., Ulloa, R., Kulshrestha, J. (2022). Where the Earth is flat and 9/11 is an inside job: A comparative algorithm audit of conspiratorial information in web search results. Telematics and Informatics. <https://doi.org/10.1016/j.tele.2022.101860>*
2. *Urman, A., Katz, S. (2022). Online publicity and outcomes of individual politically salient criminal cases in an authoritarian regime: evidence from Russia. Political Research Exchange. <https://doi.org/10.1080/2474736X.2022.2095920>*
3. *Urman, A., Makhortykh, M. (2022). "Foreign Beauties Want to Meet You": the sexualization of women in Google's organic and sponsored text search results. New Media and Society. <https://doi.org/10.1177/14614448221099536>*
4. *Ulloa, R., Richter, A., Makhortykh, M., Urman, A., Kacperski, C. (2022). Representativeness and Face-ism: Gender Bias in Image Search. New Media and Society. <https://doi.org/10.1177/14614448221100699>*
5. *Sipka, A., Hannak, A., Urman, A. (2022). Comparing the Language of QAnon-related content on Parler, Gab, and Twitter. Web Science Conference, 2022. <https://doi.org/10.1145/3501247.3531550>*
6. *Ulloa, R., Makhortykh, M., Urman, A. (2022). Scaling up Search Engine Audits: Practical Insights for Algorithm Auditing. Journal of Information Science. <https://doi.org/10.1177/01655515221093029>*
7. *Boeker, M., Urman, A. (2022). An Empirical Investigation of Personalization Factors on TikTok. WWW '22: Proceedings of the ACM Web Conference 2022. <https://doi.org/10.1145/3485447.3512102>*
8. *Urman, A., Makhortykh, M., Ulloa, R. (2022). Auditing the representation of migrants in image web search results. Humanities and Social Sciences Communications. <https://doi.org/10.1057/s41599-022-01144-1>*

9. Makhortykh, M., *Urman, A.*, Münch, F., Heldt, A., Dreyer, S., Kettemann, M. (2022). **Not all who are bots are evil: A cross-platform analysis of automated agent governance.** *New Media and Society*. <https://doi.org/10.1177/14614448221079035>
10. de Leon, E., Makhortykh, M., Gil-Lopez, T., *Urman A.*, Adam, S. (2022). **News, Threats, and Trust: How COVID-19 News Shaped Political Trust, and How Threat Perceptions Conditioned This Relationship.** *The International Journal of Press/Politics*. <https://doi.org/10.1177/19401612221087179>
11. Makhortykh, M., *Urman, A.*, Wijermars, M. (2022). **A story of (non)compliance, bias, and conspiracies: How Google and Yandex represented Smart Voting during the 2021 parliamentary elections in Russia.** *Harvard Kennedy School Misinformation Review*. <https://doi.org/10.37016/mr-2020-94>
12. *Urman, A.*, Ionescu, S., Garcia, D., Hannak, A. (2022). **The Politicization of Medical Preprints on Twitter during the Early Stages of COVID-19 Pandemic.** *Journal of Quantitative Description: Digital Media*. <https://doi.org/10.51685/jqd.2022.003>
13. *Urman, A.*, Katz S. (2022). **What they do in the shadows: examining the far-right networks on Telegram.** *Information, Communication & Society*. <https://doi.org/10.1080/1369118X.2020.1803946>
14. Makhortykh, M., *Urman, A.*, Gil-Lopez T., Ulloa R. (2021). **To track or not to track: Examining perceptions of online tracking for information behavior research.** *Internet Research*. <https://doi.org/10.1108/INTR-01-2021-0074>
15. *Urman, A.*, Ho, J.C., Katz, S. (2021). **Analyzing protest mobilization on Telegram: the case of 2019 Anti-Extradition Bill movement in Hong Kong.** *PLOS One*. <https://doi.org/10.1371/journal.pone.0256675>
16. Makhortykh, M., *Urman, A.*, Ulloa, R. (2021). **Hey, Google, is this what the Holocaust looked like? Auditing algorithmic curation of visual historical content on Web search engines.** *First Monday*. <https://dx.doi.org/10.5210/fm.v26i10.11562>
17. *Urman, A.*, Makhortykh, M., Ulloa, R. (2021). **The Matter of Chance: Auditing Web Search Results Related to the 2020 U. S. Presidential Primary Elections Across Six Search Engines.** *Social Science Computer Review*. <https://doi.org/10.1177/08944393211006863>
18. Christner C., *Urman, A.*, Adam S., Maier M. (2021). **Automated Tracking Approaches for Studying Online Media Use: A Critical Review and Recommendations.** *Communication Methods and Measures*. <https://doi.org/10.1177/08944393211006863>
19. Makhortykh, M., *Urman, A.*, Ulloa, R. (2021). **Detecting race and gender bias in visual representation of AI on web search engines.** In L. Boratto, S. Faralli, M. Marras, G. Stilo (Eds.), *Advances in Bias and Fairness in Information Retrieval* (pp. 36–50). Springer International Publishing. https://doi.org/10.1007/978-3-030-78818-6_5
20. *Urman, A.*, Makhortykh, M., Ulloa, R. (2021). **Auditing source diversity bias in video search results using virtual agents.** *Third Workshop on Fairness, Accountability, Transparency, Ethics and Society on the Web (FATES)*. Companion proceedings of the 2021 Web Conference. <https://doi.org/10.1145/3442442.3452306>
21. *Urman, A.*, Makhortykh, M. (2021). **There can be only one truth: Ideological segregation and online news communities in Ukraine.** *Global Media and Communication*. <https://doi.org/10.1177/17427665211009930>
22. Makhortykh, M., *Urman, A.*, Ulloa, R. (2020). **How search engines disseminate information about the coronavirus and why they can do better.** *Harvard Kennedy School Misinformation Review*. <https://doi.org/10.37016/mr-2020-017>
23. *Urman, A.* (2020). **Context matters: political polarization on Twitter from a comparative perspective.** *Media, Culture and Society*. <https://doi.org/10.1177/0163443719876541>
24. *Urman, A.* (2019). **News Consumption of Russian Vkontakte Users: Polarization and News Avoidance.** *International Journal Of Communication*, 13, 25. <https://ijoc.org/index.php/ijoc/article/view/11161>

AWARDS, SCHOLARSHIPS AND FUNDING

- COST Action What are Opinions? Integrating Theory and Methods for Automatically Analyzing Opinionated Communication (OPINION)** 2022-2026
Secondary Proposer, Management Committee Member.
European Union
- Research Grant, An Overview of the Swiss Political Telegram User Communities and their Role in the Distribution of Toxic Speech, 46160CHF** June 2021-July 2022
PI
Federal Office of Communications, Switzerland
- Research Grant, Algorithmic curation of (political) information and related biases, 2800CHF** 2020
PI
Förderverein Kommunikations-und Medienwissenschaft der Universität Bern
- EuroCSS Datathon Challenge Winner** September 2019
EuroCSS 2019, ETH Zurich
- Full grant for participation in SICSS Bamberg** August 2019
Covering tuition and housing
Alfred P. Sloan & Russell Sage Foundations
- Top Student Paper Award, ICA** May 2019
Political Communication Division of International Communication Association, ICA Annual Conference
- CEU Master's Scholarship** 2016-2017
Covering tuition fees (12000 EUR), housing and a monthly stipend of 50,000 HUF
- Jaguar-Landrover Scholarship for Extracurricular Activities, 1000USD** Spring 2015
Higher School of Economics & Jaguar-Landrover
- HSE Merit-based Scholarship, 100% of Tuition Fees, ca. 7000USD per year** 2012-2016
Higher School of Economics

TEACHING

- Social Computing.** Invited Instructor for the lectures on Algorithm Auditing; Spring Semester 2021 and 2022, Undergraduate Course, University of Zurich (in Spring 2021 taught virtually due to the COVID-19 pandemic).
- Introduction to Computational Social Science with Applications in R.** Co-instructor, course co-designer (together with Max Pellert); Fall Seminar in Computational Social Science, 1-week block course, GESIS (taught virtually due to COVID-19 pandemic).
- Blame it on the internet? How the world wide web changed the world in three decades.** Instructor, course designer; Spring Semester 2021, Undergraduate course, University of Bern (taught virtually due to COVID-19 pandemic).
- Political Communication and the Internet.** Instructor, course designer; Fall Semester 2019, Undergraduate course, University of Bern. Average teaching evaluation score: 4.75 out of 5.
- Machine Learning for Social Science Research.** Instructor, course designer; Fall Semester 2019, Open to BA and MA students, University of Bern. Average teaching evaluation score: 4.69 out of 5.
- Introduction to R for Communication Research.** Co-Instructor (with Dr. Ueli Reber, Dr. Tom Haeussler, Dr. Marlene Kammerer); Fall Semester 2019; 2020, Block course, University of Bern.
- Social Media Analysis Using R.** Instructor, course designer; Fall Semester 2018, Undergraduate course, University of Bern. Average teaching evaluation score: 4.2 out of 5.

FURTHER EDUCATION

- Network Science Project Course** Spring 2020
ETH Zurich, Switzerland

Network Modeling Course ETH Zurich, Switzerland	<i>Fall 2019</i>
Summer Institute in Computational Social Science University of Bamberg, Germany	<i>August 2019</i>
Text Mining with R University of Hohenheim, Germany	<i>June 2019</i>
Global Business Journalism Program Tsinghua University, China	<i>Fall 2017</i>
Exchange Program Kookmin University, South Korea	<i>Fall 2015</i>

CONFERENCE PRESENTATIONS

Conferences: ICA 2019, 2020, 2021, 2022; EuroCSS 2019, 2020; AoIR 2020; IC2S2 2019, 2021; Sunbelt 2020; DACH21 2020; Digital Societies 2019; FATES Workshop 2021; BIAS Workshop 2021; ASEEES 2021. Full list of presentations is available upon request.

SUPERVISION EXPERIENCE

Master's Basic Module: "Biases and Fairness in the Use of Machine Learning for Personalized Nutrition" - Department of Informatics, University of Zurich (2021)

BSc Thesis: "Empirical Analysis of the Recommendation Algorithm of TikTok" - Department of Informatics, University of Zurich (2021)

BSc Thesis: "Measuring Differences in Rating Behaviours on Hotel Booking Websites by Demographics" - Department of Informatics, University of Zurich (2021)

BA Thesis: "Persuasion in Online Debates - A Study of the r/changemyview Subreddit" - Department of Social Sciences, University of Bern (2020)

SKILLS

Research methods:

Advanced knowledge, extensive experience: network analysis and modeling, quantitative text analysis, machine learning, web scraping, algorithm auditing.

Medium experience and knowledge: data visualization, statistics, survey-based research, focus groups-based research, experiments for social science research.

Programming: R, basic Python.

Languages: Russian (native); English (fluent - C2, Cambridge Exams CPE Certificate); German (Goethe-Zertifikat B1), Spanish (DELE B1), French and Korean (intermediate).

EXTERNAL INVITED TALKS

Algorithmic Curation of Search Engine Content and Social Biases. June 2022, Guest Lecture, Cutting-edge Communication Research Speaker Series, ASCoR - University of Amsterdam, Netherlands

Algorithm Audits in Online Environments: Current Findings, Approaches and Future Research Agenda. June 2022, Guest Lecture, ZeMKI - University of Bremen, Germany

Gender Equitable Futures in Technology: Tackling Bias November 2021, Invited Speaker at the Panel Discussion, organized by EqualsEU project and TechSec at IHEID, Geneva, Switzerland

The politicization of medical preprints online during the early stages of COVID-19 pandemic. July 2021, Guest Lecture at the "Behavioral Digital Trace Data in Response to the COVID-19 Pandemic" Summer School, organized by the Social ComQuant Project

Russian Protests of 2021 on TikTok and Telegram. February 2021, Invited Speaker at the Virtual Event "Navalny and the Kremlin: Politics and Protest in Russia" co-hosted by the Harriman Institute at Columbia University and the New York University Jordan Center for the Advanced Study of Russia, the US

(Un)reliable and (un)interpretable narrators? How search engines represent COVID-19 via text and image search results. December 2020, Guest Lecture together with Dr. Mykola Makhortykh, University of Passau, Germany

Computational Methods for Social Science Research. November 2020, Guest Lecture, University of Fribourg, Switzerland

Auditing Algorithmic Content Curation Using Virtual Agents. November 2020, Guest Lecture together with Dr. Mykola Makhortykh and Dr. Roberto Ulloa, University of Koblenz-Landau, Germany

REVIEWER EXPERIENCE AND OTHER SERVICE, PROFESSIONAL MEMBERSHIPS

Ad-hoc reviewer for the following journals: ACM Transactions on Recommender Systems; Information, Communication and Society; Social Media and Society; New Media and Society; Journal of Information Technology and Politics; HKS Misinformation Review; Journal of Communication; International Journal of Communication; Communication Monographs; Social Science Computer Review; SAGE Open; Comunicar; Social Network Analysis and Mining; Political Communication; Science Communication.

Management committee member representing Switzerland for the COST Action "What are Opinions? Integrating Theory and Methods for Automatically Analyzing Opinionated Communication (OPINION)" (since July 2022).

Internationalization committee member, Communication and Technology Division, International Communication Association (since June 2022).

Mittelbau Board (a body representing early- and mid-career researchers) member at the Department of Social Sciences of the University of Bern in 2020-2021.

Program committee member and a Datathon *co-organizer* at IC2S2 2021 (hosted by ETH Zurich).

Co-organizer of the Digital Democracy Workshop at the University of Zurich (Fall 2022).

Co-organizer of a workshop series on the topic of challenges and opportunities of archiving social media data in the context of crisis events. Conducted in cooperation between the University of Zurich, University of Bern, and the Centre of Urban History in Lviv (Ukraine).

Member of International Communication Association; Association of Internet Researchers; Digital Society Initiative of the University of Zurich.

MEDIA COVERAGE

My research on far-right communities on Telegram has been covered by [Wired UK](#), [The Economist](#), [SRF \(Einstein\)](#), [BBC Radio 4](#), [Le Temps](#) and [NZZ](#). My article about political polarization on Twitter was referenced by [FiveThirtyEight](#). Research on Telegram-based activity in Hong Kong during the Anti-ELAB protests of 2019 was mentioned in [The Washington Post](#), and research on the prevalence of conspiratorial content in web search results was covered by [The New York Times](#), [The Moscow Times](#), [Input](#) and [Meduza](#).