Robert Soden

Assistant Professor
Department of Computer Science, School of the Environment
University of Toronto

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http://robertsoden.io

RESEARCH AREAS

Crisis Informatics, human-computer interaction (HCI), computer supported cooperative work (CSCW), infrastructure studies, science and technology studies (STS), sustainable HCI, participatory sensing, critical data studies, civic technology

RESEARCH METHODS

Ethnography, design research, public participation, system building and evaluation

EDUCATION

Ph.D., Computer Science   2019
University of Colorado Boulder

Dissertation:
Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern

Committee:
Leysia Palen (chair), Lilly Irani, Jed Brubaker, Joe Bryan, Clayton Lewis, Ken Anderson

Master of Arts, Natural Resources and Sustainable Development   2007
American University, Washington DC

Bachelor of Arts, Political Science   2003
Bachelor of Arts, History
University of Illinois Chicago, Chicago, IL

PROFESSIONAL EXPERIENCE

University of Toronto   7/2020 – Present
Assistant Professor
Computer Science & School of the Environment

Courses Taught:
Social Media & Environmentalism
Design Theory & Human-Computer Interaction
Disaster Research from an Interdisciplinary Perspective

Columbia University   7/2019 – 6/2020
Department of Computer Science
Post-doctoral Researcher
Teaching Assistant for Advanced Web Design Studio (Fall 2019)

World Bank   3/2011 – 6/2021
Global Facility for Disaster Reduction and Recovery
Senior Disaster Risk Management Consultant

University of Colorado Boulder   8/2013 – 5/2019
Department of Computer Science
Graduate Research Assistant
Teaching Assistant for Social Computing (Spring 2014)

Stanford University   9/2016 – 12/2017
Civil and Environmental Engineering
Visiting Adjunct Lecturer

Courses Taught:
International Development and Disaster Risk (Fall 2016)
Topics in Disaster Resilience Research (Fall 2016, Winter 2017, Spring 2017, Fall 2017)

Development Seed   3/2008 – 12/2010
Lead Software Developer

American University   6/2005 – 8/2005
School of International Service
Teaching Assistant
Course: International Development and the Environment (Online, Summer 2005)

GRANTS

Situational Awareness for Community-Based Resilience to Disasters and Climate Change. 2022. *NSERC Discovery Grant.* $145,000. Principal Investigator.

Equity and Inclusion in Disaster Risk Assessments: Reviewing Current Practice to Inform Future Work. 2021. *SSHRC Partnership Engage Grant.* $16,175 CAD. PI.

Evolving dynamics of corporate contributions in OpenStreetMap. 2021. *SSHRC Insight Development Grant.* $87,000 CAD. Co-PI.

Photovoltaic Imagination: Solar Strategies for Community Integrated Research-Creation and Graduate Training. 2022. *University of Toronto-University of Edinburgh - Joint Call for Collaborative Projects.* $17,000. Collaborator.

Research Capacity for a Climate Positive Health System: The International Research Network for Climate Positive Care (IRNCPC) 2021. *Connaught Global Challenge Award.* $249,820. Collaborator

Building Community-Based Coastal Risk Awareness through Interactive Public Art and New Media. 2022. *New Jersey Council on the Arts.* $7,000 (USD). Co-PI.

Co-Designing Cultural Probes for Participatory Community Mapping: Informal Emergency Shelter Planning and Management in Puerto Rico. 2020. *Natural Hazards Center Quick Response Grant.* $50,000 USD. Co-Applicant.

Community Resilience Catalyst: Co-Designing an Integrated Participatory Mapping System for Enhancing Disaster Resilience through Sustainable Community Engagement in Puerto Rico. 2020. *US National Science Foundation Civic Innovation Challenge.* $50,000 USD. Senior Personnel.

Supporting equitable disaster recovery through mapping and integration of social-vulnerability into post-disaster impact assessments. 2018. *Global Partnership for Sustainable Development Data Innovation Grant.* $248,000 USD. Co-Applicant.

Estimating regional damage to buildings: Integrating post-disaster data sources and field surveys. 2017. *US National Science Foundation EAGER.* $100,000 USD. Co-Applicant.

AWARDS AND HONORS

Best Paper (Top 1% of all submissions) October 2021
CSCW 2021

CONVERGE Researcher Working Group April 2020
Mutual Aid Response to COVID-19

Best Paper Honorable Mention (Top 5% of all submissions) November 2018
CSCW 2018

Visiting Student Researcher January 2018
University of California, Berkeley
Center for Science, Technology, Medicine & Society

Best Paper Honorable Mention (Top 5% of all submissions) May 2017
CHI 2017

Graduate Certificate in Critical Theory May 2016
CU Boulder Department of German & Slavic Language & Literature

Best Student Paper Nominee May 2015
ISCRAM 2015

Best Student Paper May 2014
ISCRAM 2014

CU Research Assistant Award April 2014
Department of Computer Science
University of Colorado Boulder

World Bank Vice Presidential Unit (VPU) Team Award April 2014
Open Data for Resilience Initiative, Caribbean

PUBLICATIONS

Book Chapters

Soden, R. and Palen, L. (2021). The social life of disaster information: Cultivating resources for emergent information infrastructures in Nepal. In Eric Welch (Ed.) *Research Handbook on E-Government*. Edward Elgar.

Journal Articles

Soden, R., Devendorf, L., Wong, R., Akama, Y., Light, A. (2022). Modes of Uncertainty in HCI. Foundations and Trends in HCI. (Forthcoming).

Gevaert, C.M., Carman, M., Rosman, B., Georgiadou, Y. and Soden, R., 2021. Fairness and accountability of AI in disaster risk management: Opportunities and challenges. Patterns, 2(11), p.100363.

Bhattacharjee, G., **Soden, R**., Barns, K., Loos, S., Lallemant, D. (2021). Factors affecting earthquake responders building damage information needs and use. Earthquake Spectra. Earthquake Engineering Research Institute.

Krishnan, S., **Soden, R**., Aguihon, B., Liu, R. and Khatiwada, P., (2021). Cross-country use of participatory research methods in practice to enhance inclusive decision-making. Disaster Prevention and Management: An International Journal.

Wagenaar, D., Curran, A., Balbi, M., Bhardwaj, A., **Soden, R.,** Hartato, E, Sarica, G.M., Ruangpan, L., Molinario, G., Lallemant, D. (2020). Invited perspectives: How machine learning will change flood risk and impact assessment.

Anderson, J., **Soden, R**., Keegan, B., Palen, L., Anderson, K. (2018). The Crowd is the Territory: Assessing Quality in Peer-Produced Spatial Data During Disasters. *International Journal of Human Computer Interaction*. Taylor and Francis.

Lallemant, D., **Soden, R**., Rubinyi, S., Loos, S., Barns, K., Bhattacherjee, G. (2017). Post-disaster damage assessments as catalysts for recovery: A look at the assessments conducted in the wake of the 2015 earthquake in Nepal. *Earthquake Spectra*. Earthquake Engineering Research Institute.

Peer-Reviewed Conference Papers

Mahmud, Z., Chauhan, A., Sarkar, D., **Soden, R**. (2022). Revisiting Engagement in Humanitarian Mapping: An Updated Analysis of Contributor Retention in OpenStreetMap. In Extended Abstracts of ACM CHI. (Forthcoming).

Veselovsky, V., Sarkar, D., Anderson, J., **Soden, R.** (2022) An Automated Approach to Identifying Corporate Editing. In ICWCM (Forthcoming)

Soden, R., Chilton, L., Miles, S., Bicksler, R., Villanueva, K,. Bica, M. (2022). Insights and Opportunities for HCI Research into Hurricane Risk Communication. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI).* Forthcoming.

Moitra, A., **Soden, R**., Kalirai, M., Wagenaar, D., Ahmed, I. (2022). AI and Disaster Risk: A Practitioner Perspective. *In Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW).* Forthcoming.

Soden, R., Ribes, D., Avle, S., Sutherland, W. (2021). Time for Historicism in CSCW: An Invitation. In Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW). **Best Paper Award.**

Soden, R., Owen, E. (2021). Dilemmas in Mutual Aid: Lessons for Crisis Informatics from an Emergent Community Response to the Pandemic. In Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW).

Soden, R., Pathak, P., Dogget, O. (2021). What We Speculate About When We Speculate About Sustainable HCI. In Proceedings of the ACM Conference on Computing and Sustainable Societies (COMPASS).

Soden, R., Lallemant, D, Hamel, P., Barns, K. (2021). Becoming Interdisciplinary: Fostering Critical Engagement with Disaster Data. *In Proceedings of the ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW).*

Soden, R. Lalone, N., Dailey, D. (2021). A Speculative Patent Application for NEXTGEN Flood Early Warning System. *In Proceedings of 2021 ACM Conference on GROUP.*

Soden, R. Hamel P, Lallemant D, Pierce J. (2020) The Disaster and Climate Change Artathon: Staging Art/Science Collaborations in Crisis Informatics. *In Proceedings of the 2020 ACM on Designing Interactive Systems Conference.*

Soden, R., Kauffman, N. (2019). Infrastructuring the Imaginary: How Sea-level Rise Comes to Matter in The San Francisco Bay Area. In *Proceedings of the 2019 Conference on Human Factors in Computing Systems.*

Soden, R., Lord, A. (2018). Mapping Silences, Reconfiguring Loss: Practices of Damage Assessment & Narratives of Repair in Post-Earthquake Nepal*. In Proceedings of the 21st ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW).* **Best Paper Honorable Mention.**

Soden R., Palen, L. (2018). Informating Crisis: Expanding Critical Perspectives in Crisis Informatics. *In Proceedings of the 21st ACM Conference on Computer Supported Cooperative Work & Social Computing (CSCW).*

Dailey, D., **Soden, R**., Lalone, N. (2018). Crisis Informatics for Everyday Analysts: A Design Fiction Approach to Social Media Best Practices. In *Proceedings of the 2018 International Conference on Supporting Group Work (GROUP).* ACM.

Soden, R., Sprain, L., Palen, L., (2017). Thin Grey Lines: Confrontations With Risk on Colorado's Front Range. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems* (pp. 2042-2053). ACM. **Best Paper Honorable Mention.**

Kogan, M., Anderson, J., **Soden, R**., Anderson, K., Palen, L. (2016). Collaboration in OpenStreetMap: A Network Analysis of Two Humanitarian Events. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 2783-2795). ACM.

Soden, R., Palen, L. (2016). Infrastructure in the Wild: What Mapping in Post-Earthquake Nepal Reveals about Infrastructural Emergence. In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems* (pp. 2796-2807). ACM.

Anderson, J., **Soden, R**., Anderson, K., Kogan, M., Palen, L. (2016). EPIC-OSM: A Software Framework for OpenStreetMap Data Analytics. *Proceedings of the Hawaii International Conference on System Sciences (HICSS)*(pp. 5468-5477). IEEE.

Soden, R., Palen, L. , Chase, C., Deniz, D., Arneson, E., Sprain, L., Goldstein, B., Liel, A., Javernick-Will, A., Dashti, S. (2015). The Polyvocality of Resilience: Discovering a Research Agenda through Interdisciplinary Investigation and Community Engagement. In *Proceedings of the Information Systems for Crisis Response and Management* (ISCRAM). **Best Student Paper Nomination**.

Palen, L., **Soden, R**., Anderson, J., Barrenechea, M (2015). Success & Scale in a Data-Producing Organization: The Socio-Technical Evolution of OpenStreetMap in Response to Humanitarian Events. In *Proceedings of the ACM 2015 Conference on Human Factors in Computing Systems* (pp, 4113-4122). ACM.

Soden, R., Palen, L. (2014). From Crowdsourced Mapping to Community Mapping: The Post Earthquake Work of OpenStreetMap Haiti. In *Proceedings of the 11th International Conference on the Design of Cooperative Systems* (COOP) (pp. 311-326).

Soden, R., Budhathoki, N., Palen, L. (2014). Resilience and Crisis Informatics: Lessons Learned from Open Cities Kathmandu. In *Proceedings of the Conference on Information Systems for Crisis Response and Management* (ISCRAM). **Best Student Paper Award.**

Peer Reviewed Research Reports
Soden, R., Miles, S., Bannister, S., Bicksler, R., Leiva, A. (2022). Optimizing Tropical Cyclone Information: An NOAA Hurricane Website User Experience Study from a Public Perspective. National Oceanic and Atmospheric Administration (NOAA) – Office of Oceanic and Atmospheric Research.

Siru, J., Qin, Jasmine, **Soden, R**., Quijano, G. and Castillo, Y.D., 2021. Co-Designing a Participatory Community Mapping Method for Informal Sheltering in Puerto Rico. Natural Hazards Center. (46 pages).

Soden, R. Wagenaar, D., Tijssen, A. (2021) Responsible Machine Learning for Disaster Risk Management: Working Group Report. World Bank.

Deparday, V., Gevaert, C., Giuseppe Molinario, G., **Soden, R.** Balog-Way, S. (2019). Machine learning for disaster risk management. World Bank. Washington, DC.

Soden, R. (2017). *Natural Hazard Data: A Practical Guide.* Asian Development Bank Publications.

Haklay, M. E., Antoniou, V., Basiouka, S., **Soden, R**., & Mooney, P. (2014). *Crowdsourced Geographic Information Use in Government.* World Bank Publications.

Peer Reviewed Workshops Organized

Liu, J., Lin, C., Pasek, A., **Soden, R**., Padilla L. Rosner, D., Jackson, S. (2022). Towards a Material Ethics of Computing: Addressing the Uneven Environmental Stakes of Digital Infrastructures. CHI 2022. New Orleans, LA.

Soden, R., Devendorf, L., Wong, R., Chilton, L., Light, A., Akama, Y. (2020) *Embracing Uncertainty in HCI.* CHI 2020. Honolulu, HI.

Soden, R., Ribes, D., Jack, M., Sutherland, W., Khovanskaya, V., Avle, S., Sengers, P. and Bødker, S., (2019). *Fostering Historical Research in CSCW & HCI*. CSCW2019. Austin, TX.

Soden, R., Skirpan, M., Fiesler, C., Ashktorab, Z., Baumer, E., Blythe, M., Jones, J. (2019). *CHI4Evil: Creative Speculation On the Negative Impacts of HCI Research.* CHI2019. Glasgow.

Workshop Papers, Lightly Reviewed Writing, & Non-Archival Conference Presentations
Soden, R., 2022. *Reimagining environmental data*. ACM Interactions, 29(1), pp.44-47.

Soden, R, Wernimont, J., Knowles, S. (2022). Accounting for Care in Times of Crisis. Social Science Research Council: Items. Online at: https://items.ssrc.org/covid-19-and-the-social-sciences/disaster-studies/accounting-for-care-in-times-of-crisis/

Soden, R., Miles, S. (2022). *Optimizing Tropical Cyclone Information: An NOAA Hurricane Website User Experience Study from a Public Perspective.* National Hurricane Conference.

Soden, R., Miles, S. (2021). *Optimizing Tropical Cyclone Information: An NOAA Hurricane Website User Experience Study from a Public Perspective.* Society for Risk Analysis (SRA) Annual Meeting.

Soden, R. (2021). *Art/Science and Interdisciplinary Collaboration as Critical Technical Practice in Disaster Research*. Annual Meeting of the Society for the Study of Social Science (4S).

Soden, R. (2021). *Art/Science Collaboration as a Critical Technical Practice in Disaster Research*. Northern European Conference on Emergency and Disaster Studies (NEEDS).

Krishnan, S., **Soden. R**., Kathiwada, P.. Aguinon, B., Liu, R. (2021). *Cross-country use of participatory research methods in practice to enhance inclusive decision making.* Northern European Conference on Emergency and Disaster Studies (NEEDS).

Soden, R. (2021) *COVID-19 and Business Impacts*. Session moderator at Natural Hazards Center Workshop.

Leiva, A, **Soden, R.,** Bannister, S., Miles, S. (2021). *Human-Centered Design for Hurricane Risk Communication.* Poster at Natural Hazards Center Workshop.

Soden, R., Pathak, P., Dogget, O. (2021). What We Speculate About When We Speculate About Sustainable HCI. Poster at Natural Hazards Center Workshop.

Veselovsky, V., Sarkar, D., Anderson, J. and **Soden, R**. (2021). An automated approach to identifying corporate editing activity in OpenStreetMap. In Proceedings of the Academic Track at the State of the Map 2021 Online Conference (pp. 31-33).

Palen, L., Anderson, J., Bica, M., Castillos, C., Crowley, J., Díaz, P., Finn, M., Grace, R., Hughes, A., Imran, M., Kogan, M., and **Soden, R**. (2020) Crisis Informatics: Human-Centered Research on Tech & Crises. Guided Bibliography.

Clark-Ginsberg, A., Garriga-Lopez, A., Harris, J., Henderson, J., Kirchoff, C., Owen, E., Slick, J., **Soden, R.,** Stoecker, R., Milstein, D., Tagliacozzo, S., Thaler, T., Wisner, B. (2020) CONVERGE COVID-19 Working Groups for Public Health and Social Sciences Research: Research Agenda-Setting Paper.

Soden, R. (2020) Crisis Informatics and Mutual Aid during the Coronavirus Pandemic: A Research Agenda. Posted on *Social Science Research Council (SSRC) Insights from the Social Sciences*. Available at: https://items.ssrc.org/covid-19-and-the-social-sciences/disaster-studies/crisis-informatics-and-mutual-aid-during-the-coronavirus-pandemic-a-research-agenda/

Soden, R. Wagenaar, D., Luo, D. and Tjieesen, A. (2019). Taking Ethics, Fairness, and Bias Seriously in Machine Learning for Disaster Risk Management. Presented at *NeurIPS 2019 Workshop on Machine Learning for International Development (ML4D)*. Vancouver, BC.

Soden, R. (2019) Modes of Uncertainty: Rethinking Flood Risk in Colorado. Posted on *Social Science Research Council (SSRC) Insights from the Social Sciences*. Available at: https://items.ssrc.org/chancing-the-storm/modes-of-uncertainty-rethinking-flood-risk-in-colorado/

Soden, R. (2019). Modes of Uncertainty: Negotiating Flood Risk Between Engineers, Bureaucrats, and Publics. Presented at *Society for Social Studies of Science (4S)*. New Orleans, LA.

Soden, R. (2019). Modes of Uncertainty. Presented at *The Other Uncertainty: Social, Political, and Cultural Forms of Uncertainty in Weather Contexts* at the 2019 Meeting of the American Meteorological Society. Phoenix, AZ.

Soden, R. (2018). Toward Disasters as Matters of Care. Presented at *CSCW 2018 Workshop on Sociotechnical Systems of Care.* Jersey City, New Jersey.

Soden, R., Lord, A. (2018). Mapping Silences, Reconfiguring Loss: Practices of Damage Assessment & Narratives of Repair in Post-Earthquake Nepal. Presented at *2017 Meeting of the Society for Social Studies of Science (4S)*. Sydney, AU.

Soden, R., Lord, A. (2018). Mapping Silences, Reconfiguring Loss: Practices of Damage Assessment & Narratives of Repair in Post-Earthquake Nepal. Presented at *Natural Hazards Workshop*. Boulder, CO.

Soden, R. (2018). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. In Companion of the 2018 ACM Conference on Conference on Human Factors in Computing Systems (CHI Doctoral Colloquium). ACM.

Soden, R., Lord, A. (2017). Narrating Disaster, Contesting Reconstruction: Design Notes on Practices of Damage Assessment in the Wake of the 2015 Nepal Earthquake. Presented at *2017 Meeting of the Society for Social Studies of Science (4S)*. Boston, MA.

Lord, A., **Soden, R.** (2017). Infrastructuring Humanitarian Ignorance in Nepal's Post-Disaster Taskscape. Presented at *2017 Conference on the Changing Political Economy of Risk and Ignorance (CPERI)*. Boston, MA.

Soden, R. (2017). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. *In Companion of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (CSCW Doctoral Colloquium) (pp. 93-96). ACM. Seattle, WA.

Soden, R. (2017). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. At *2017 Human Computer Interaction Consortium* (HCIC). Watsonville, CA.

Soden, R. (2017). Informating Crisis. At *2016 Workshop on Crisis Informatics & Human Computer Interaction*. Boulder, Colorado.

Dennis, E., **Soden, R**. (2016). Towards Cartographic Standards for Web-Based Flood Hazard Maps. Presented at *2016 GIS in the Rockies Conference.* Denver, CO.

Soden, R. (2016). Reconfiguring Loss: Memory Practice & Participatory Damage Assessment in Post-Earthquake Nepal. Presented at *2016 Human Computer Interaction Consortium* (HCIC). Watsonville, CA.

Soden, R., Budhathoki, N. (2016). Alternate Constructions of Damage: Frictional Design and Disaster Impact Assessment in Post-Earthquake Nepal. Presented at *2016 CHI Workshop on HCI Across Borders*. San Jose, CA.

Soden, R. (2015). Ecologies of Risk Information: A Comparative Approach. Presented at *2015 CHI Workshop on Ecological Perspectives in HCI: Promise, Problems, and Potential*. Seoul, South Korea.

Soden, R. (2015). OpenStreetMap & Disaster Risk Management: Experiences from the Open Cities Project. Presented at *2015 Conference of the Citizen Science Association*. San Jose, CA.

Soden, R. (2015). Information Infrastructure & Disaster Risk: A Comparative Approach. Presented at *2015 Information Systems for Crisis Response and Management (ISCRAM) Doctoral Colloquium*. Kristiansand, Norway.

Invited Talks & Guest Lectures
Soden, R., Lallemant, D., Kalirai, M, Liu, C., Wagenaar, D. (2022) *Equity in Disaster Risk Assessment: Reviewing Current Practice to Guide Future Work*. Presented at World Bank.

Soden, R., Miles, S. (2022). *Optimizing Tropical Cyclone Information: An NOAA Hurricane Website User Experience Study from a Public Perspective.* Presented at the US National Hurricane Center.

Soden, R. (2021). *Responsible AI for Disaster Risk Management.* Presented at 2021 Understanding Risk Asia Forum. Organized by the World Bank.

Soden, R. (2021). *Responsible AI for Disaster Risk Management: : A Community of Practice Perspective.* Presented at Western-ICLR Multi-hazard Risk and Resilience Workshop.

Soden, R. (2021). *Responsible AI for Disaster Risk Management: A Community of Practice Perspective.* Presented at University of Toronto Ethical Principles in Artificial Intelligence Team Meeting.

Soden, R., Miles, S. (2021). *Design Research for Science Communication to the Public.* United States National Oceanographic and Atmospheric Association (NOAA).

Soden, R. (2021) *Art/Science and Interdisciplinary Collaboration in Disaster and Climate Change Research*. Natural Hazards Center Workshop.

Soden, R. (2021). *Art/Science and Interdisciplinary Collaboration in Disaster and Climate Change Research.* University of Toronto School of the Environment Lunch Lab.

Soden, R. (2021). *Responsible AI for Disaster Risk Management: A Practitioner Perspective.* University of Toronto Centre for Ethics.

Soden, R. (2020). *Responsible AI for Disaster Risk Management*. Deltares.

Soden, R. (2020). *Human-Centered Design for Hurricane Risk Communication*. United States National Hurricane Center (NHC).

Soden, R. (2020) Responsible Artificial Intelligence for Disaster Risk Management: A Community of Practice Perspective. *Natural Hazards Center Workshop Researcher's Meeting.*

Soden, R. (2020). *Dilemmas in Mutual Aid: Lessons for Crisis Informatics Research*. Natural Hazards Center Converge Working Group on Hyper-Local Responses to COVID-19.

Soden, R. (2020). *Towards a Critical Technical Practice for Disaster Research.* Responsible Engineering, Science and Technology for Disaster Risk Management Working Group.

Soden, R. (2020). *The Social Life of Disaster Data: Lessons from Crisis Informatics.* University of Toronto School of the Environment Graduate Seminar.

Soden, R. (2020). The Emergent Mutual Aid Response to COVID-19. Presented at *Columbia University COVID Research Series.*

Soden, R. (2019). Ethics and Biases in Machine Learning for Disaster Risk Management. Presented at *World Bank Global Facility for Disaster Reduction and Recovery (GFDRR)*, Washington, DC.

Soden, R. (2019). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. Presented at *University of Toronto, Department of Computer Science.* Toronto, ON.

Soden, R. (2019). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. Presented at *Syracuse University, College of Information Science.* Syracuse, NY.

Soden, R. (2019). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern.

Presented at *Drexel University, College of Computing and Informatics*. Philadelphia, PA.

Soden, R. (2019). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. Presented at *University of Washington, Department of Human Centered Design & Engineering*. Seattle, WA.

Soden, R. (2019). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. Presented at *University of Colorado, Department of Information Science.* Boulder, CO.

Soden, R. (2019). Crisis Informatics in the Anthropocene: Disasters as Matters of Care & Concern. Presented at *AINow*. New York, NY.

Soden, R. (2018). Rethinking Post-Disaster Damage Assessment: Lessons from Critical Data Studies. Presented at *Earth Observatory of Singapore*. National Technical University of Singapore.

Soden, R. (2018). The Social Life of Disaster Data. Presented at *2018 Understanding Risk Forum*. Mexico City, Mexico.

Soden, R., Lallemant, D. (2017). Crowdsourcing Damage Assessment to Improve Response and Recovery Following Natural Disasters. Presented at *Stanford HCI Lunch.* Stanford, CA.

Soden, R. (2016). There's No Such Thing as Raw Crisis Data. At *AAS Workshop on Ethics of Location-Based Data in Crisis Situations*. American Association for the Advancement of Science (AAAS). Washington, D.C.

Soden, R. (2015). Collective Information Infrastructures During Disaster Response: Findings from the 2015 Nepal Earthquake. Presented at *The Role of Crisis Informatics in Disaster Management: The Case of Nepal Earthquake.* Kathmandu, Nepal.

Soden, R. (2015). The Polyvocality of Resilience: Discovering a Research Agenda through Interdisciplinary Investigation and Community Engagement. Presented at *Information Systems for Crisis Response and Management (ISCRAM) Plenary*. Kristiansand, Norway.

Soden, R. (2014). Open Data for Disaster Risk Management. Presented at *2014 Understanding Risk Forum.* London, UK.

Soden, R. (2014). Crowdsourced Mapping, Community Mapping, & Disaster Resilience. Guest Lecturer *Social Computing*. Boulder, CO.

Soden, R. (2013). Growing the Global OSM Community: Lessons Learned from the Open Cities Project. Presented at *2013 State of the Map Conference.* Birmingham, UK.

Soden, R. (2011). Crowdsourced Mapping in the 2010 Haiti Earthquake Response. Presented at *2011 Global Platform for Disaster Risk Reduction.* Geneva, CH.

ACADEMIC SERVICE
Associate Chair for:

ACM Conference on Human Factors In Computing Systems (CHI)	2020-2022
ACM Conference on Computer Supported Cooperative Work (CSCW)	2020-2022

ACM Conference on Computing & Sustainable Societies (COMPASS)   2021-2022

Reviewer for:
ACM Conference on Human Factors In Computing Systems (CHI)
ACM Conference on Computer Supported Cooperative Work (CSCW)
ACM Conference on Supporting Group Work (GROUP)
Citizen Science: Theory and Practice
Disasters Journal
Science as Culture
MIT Press – Science, Technology, & Society List
Conference on Information Systems for Crisis Response and Management (ISCRAM)
Hawaiian International Conference on Systems Sciences (HICSS)
Journal on Science, Technology, and Human Values (STHV)
International Journal of Geo-Information (IJGI)

Stanford Urban Resilience Initiative Co-Organizer	August 2016- December 2017
Grand Challenges in Crisis Informatics Workshop Organizing Committee	May 2016
CU Boulder Reading Group on Science & Technology Studies Organizer	2015-2016
Panel Organizer on OpenStreetMap as Citizen Science Citizen Science 2015 Conference, San Jose, CA	February 2015
Panel Co-Organizer on Critical Geography and OpenStreetMap 20th Annual Critical Geography Conference, Boulder CO	February 2014

PROFESSIONAL MEMBERSHIP
Association of Computing Machinery
Society for the Social Studies of Science
Information Systems for Crisis Response and Management
OpenStreetMap Foundation
Humanitarian OpenStreetMap Team (Founding Board Member & Member)
ITU Focus Group on *AI for Natural Disaster Management*

VOLUNTEER EXPERIENCE & BOARD MEMBERSHIP
Washington DC Community Emergency Response Team (CERT): 2008-2010
Board of Directors, Humanitarian OpenStreetMap Team: 2010-2011
Code for Boulder: 2013-2015
Boulder County Latino History Project: 2013-2015
Open Oakland: 2017-2019
Advisory Board, TechChange: 2011-Present
Advisory Board, Re+Connect: 2020-Present