Contributors

Christopher Ankersen is a clinical associate professor at New York University's Center for Global Affairs, where he coordinates their Global Risk specialization. His research and teaching focus is on the fields of international security and civil—military relations. Prior to joining New York University, he worked for the United Nations in the Department of Safety and Security. His most recent publication is a co-edited volume entitled *The Future of Global Affairs: Managing Discontinuity*, *Disruption and Destruction*.

John K. Bonilla-Aranzales is a doctoral student in political science at the University of Missouri. His research uses a mixed methods approach to address the intersection between technology and conflict resolution mechanisms in peacebuilding scenarios. Mr. Bonilla-Aranzales is particularly interested in the Colombian case to understand how public opinion expressed in social media is related to transitional justice, truth, and reconciliation. Before starting his doctoral studies through a Fulbright Scholarship, John worked for almost five years as an advisor for strategic partnerships at the Direction of the Office of External Affairs at the University of Columbia.

Francesca Bosco She developed her expertise by focusing on cybercrime, cybersecurity, and the misuse of technology. More recently she focused on the opportunities, risks, and threats caused by new technologies. At the CyberPeace Institute she leads the development of knowledge and initiatives on disruptive technologies and how to increase resilience through capacity building.

Anne E. Boustead is an assistant professor in the School of Government and Public Policy at the University of Arizona. She researches legal and policy issues related to electronic surveillance, cybersecurity, privacy, and drug policy. She is particularly interested in empirically evaluating the impact of these policies on behavior in both the public and private sectors. She has a Ph.D. in policy analysis from the Pardee RAND Graduate School, where her dissertation was focused on the interplay between commercial data collection and law enforcement surveillance, and a JD from Fordham University School of Law.

Anne-Marie Buzatu is Vice-President and Chief Operating Officer of ICT4Peace. She is a co-founder of Security and Human Empowerment Solutions, a value-driven initiative to improve human security and development opportunities for international and national stakeholders and local communities. Prior to this, Anne-Marie was Deputy Head of the Public-Private Partnerships Division of DCAF – Geneva Centre for Security Sector Governance, Geneva, where she worked for nearly twelve years. In this role she led under a Swiss government mandate the development of the International Code of Conduct for Private Security Service Providers (ICoC), a multistakeholder initiative that set out international human rights—compliant principles and standards for the private security industry. She subsequently led the creation of the "International Code of Conduct Association" (ICoCA), the multistakeholder oversight mechanism for the ICoC, where she also served as Interim Executive Director.

Federica Carugati is a lecturer in history and political economy at King's College, London. Her research focuses on institutional development in premodern, citizencentered governments, and on the lessons that the emergence, configuration, and breakdown of premodern institutions hold for the theory and practice of institution building today. She is the author of A Moral Political Economy: Present, Past and Future (Cambridge University Press, 2021) and of Creating a Constitution: Law, Democracy, and Growth in Ancient Athens (Princeton University Press, 2019), and her work has appeared in leading political science journals, including the Annual Review of Political Science, Comparative Political Studies, and Perspectives on Politics, as well as popular outlets such as WIRED, The Economist, and la Repubblica.

Jean-Marie Chenou is an associate professor at the Department of Political Science of the Universidad de los Andes in Bogotá (University of the Andes in Bogotá), Colombia, where he has worked since 2016. He is also a member of the board of the Red Colombiana de Relaciones Internacionales-(Colombian Network of International Relations) (Spanish REDINTERCOL) and an affiliated scholar at the Centre of International History and Political Studies of Globalization. He holds a Ph.D. in political science from the University of Lausanne in Switzerland, and an M.A. in international relations from University Paris 2 Panthéon-Assas. Before joining Los Andes, he was a lecturer at the University of Lausanne and a visiting researcher at the Department of Business and Politics at the Copenhagen Business School in Denmark. His research interests include Internet governance, the global political economy of the digital age, and the effects of digitalization on postconflict societies. His work has been published in journals such as Colombia Internacional, International Journal of Transitional Justice, International Relations, and Globalizations.

Juliana Crema has a background in political science and international relations. She holds an Erasmus Mundus Joint Master's Degree completed at Charles University, Prague; Jagiellonian University, Krakow; and Leiden University, Leiden.

She has a range of experience across multidisciplinary areas with a primary focus on the intersection of gender, policy, and geopolitics. At the CyberPeace Institute, she is part of the advancement team, researching and analyzing how to advance the role of international law and norms in order to promote greater accountability in cyberspace.

François Delerue is a Senior Reseacher in Cybersecurity Governance at Leiden University and Project Expert on International Law for the European Cyber Diplomacy Initiative (EU Cyber Direct). He is the author of Cyber Operations and International Law (Cambridge University Press, 2020), which was awarded the 2021 Book Prize of the European Society of International Law.

Frédérick Douzet is a professor of geopolitics at the University of Paris 8, Director of the French Institute of Geopolitics research team (IFG Lab), and Director of the Geopolitics of the Datasphere (GEODE) Center. She was appointed a member of the French Defense Ethics Committee in January 2020. From 2017 to 2020, she was a commissioner of the Global Commission on the Stability of Cyberspace. In 2017, she was part of the drafting committee for the French Strategic Review of Defense and National Security. Her current research deals with the geopolitics of cyberspace, as cyberspace has become the object of power rivalries between stakeholders, a scene of confrontation, and a highly powerful tool in geopolitical conflicts. Frédérick Douzet's work aims at replacing cyber conflicts within their geopolitical context and training young researchers to take into account the cyber dimension of the geopolitical conflicts in the regions they study. She studied political science at the Institute of Political Studies of Grenoble and Oxford Brookes University. She earned a master's degree from the Graduate School of Journalism at the University of California, Berkeley in 1993, then joined the graduate school of geopolitics at the University of Paris 8 for her Ph.D. In 2015, she received the title of Chevalier de l'ordre national du Mérite in recognition of public service.

Stéphane Duguin is the CEO of the CyberPeace Institute. He has spent the last two decades analyzing how technology is weaponized against vulnerable communities. In particular, he investigated multiple instances of the use of disruptive technologies, such as artificial intelligence (AI), in the context of counterterrorism, cybercrime, cyber operations, hybrid threats, and the online use of disinformation techniques. He leads the Institute with the aim of holding malicious actors to account for the harms they cause. His mission is to coordinate a collective response to decrease the frequency, impact, and scale of cyberattacks by sophisticated actors. Prior to this position, Stéphane Duguin was a senior manager and innovation coordinator at Europol. He led key operational projects to counter both cybercrime and online terrorism, such as the European Cybercrime Centre, the Europol Innovation Lab, and the European Internet Referral Unit. He is a thought leader in digital transformation and convergence of disruptive technologies. With his work published

in major media, his expertise is regularly sought after by high-level panels, where he focuses on the implementation of innovative responses to counter new criminal models and large-scale abuse of cyberspace.

Tabrez Y. Ebrahim is an associate professor at California Western School of Law. He is an Ostrom visiting scholar at Indiana University; a scholar at George Mason University, Antonin Scalia Law School Center for Intellectual Property x Innovation Policy; a senior cyber law researcher at William & Mary Law School, Center for Legal & Court Technology; and a visiting fellow at the Nebraska Governance and Technology Center. He has been a visiting research fellow at Bournemouth University Centre for Intellectual Property Policy & Management in England and is a registered U.S. patent attorney. He graduated with J.D. and M.B.A. degrees from Northwestern University, an LL.M. degree from the University of Houston Law Center, an M.S. degree in mechanical engineering from Stanford University, and a B.S. degree in mechanical engineering from the University of Texas at Austin.

Camille François is the chief innovation officer at Graphika. François and her team use machine learning to map out online communities and the ways information flows through networks. They apply data science and investigative methods to these maps to find the telltale signatures of coordinated disinformation campaigns. François and colleagues at Oxford used this approach to help the US Senate Select Committee on Intelligence better understand Russian activities during and after the 2016 presidential election. She is also a Mozilla fellow, a Fulbright Scholar, and an affiliate of the Berkman Klein Center for Internet & Society.

Deborah Housen-Couriel is the Chief Legal Officer and Vice-President Regulation for Konfidas Digital Ltd., a cyber and data protection consulting firm located in Tel Aviv. Her expertise focuses on international cyber and data protection law. Her international experience includes work as a core expert on the Manual on International Law Applicable to Military Uses of Outer Space and as a Working Group Chair of the Global Forum on Cyber Expertise. Deborah was a member of the International Group of Experts that drafted the 2017 Tallinn Manual 2.0 on state activity in cyberspace. She currently serves on the Advisory Board of the Hebrew University Law School's Cyber Security Research Center and as a research fellow with the Reichman University's Interdisciplinary Center Herzliya's Institute for Counter-Terrorism. Deborah teaches cyber law and policy at both of these universities. In 2011, she co-chaired the Regulation and Policy Committee of the National Cyber Initiative, launched by Israel's prime minister, and from 2013 to 2014 served on National Cyber Bureau's Public Committee on the Cyber Professions. She is a graduate of Harvard Kennedy School (MPA-MC), the Law School of Hebrew University (LL.B., LL.M.), and Wellesley College (scl).

Aude Géry holds a Ph.D. in public international law and is a postdoctoral fellow at GEODE, a research and training center on the geopolitics of the datasphere

hosted at the University of Paris 8. Her thesis, which was awarded the thesis prize of the French branch of the International Law Association and the third thesis prize of the IHEDN, was on international law and the proliferation of digital weapons. Her research focuses on the international regulation of digital space and more particularly on the external legal policies of States, multilateralism in the field of ICTs in the context of international security and the normative issues flowing from the adoption of instruments on digital issues. She has participated in several highlevel dialogues on digital issues (Sino-European Dialogue on Cybersecurity, Track 1.5 dialogues organized by EU Cyber Direct, Global Commission on the Stability of Cyberspace, Paris Call for Trust and Security in Cyberspace) and regularly engages with state and non-state actors on these topics.

Kayle Giroud is a partnership and business development Assistant at the Global Cyber Alliance (GCA). Her role is to research and identify prospective partners in Europe and Africa, respond to their needs, and develop and manage engagement.

Benjamin Jensen's teaching and research explore the changing character of political violence and strategy. Jensen is Professor at the Marine Corps University (MCU), School of Advanced Warfighting. At MCU, he runs the advanced studies program. The program integrates student research with long-range studies on future warfighting concepts and competitive strategies in the US defense and intelligence communities. His book Forging the Sword: U.S. Army Doctrine, 1975–2010 was published by the Stanford University Press in 2016. His second book Cyber Strategy: The Changing Character of Cyber Power and Coercion was published in 2018 by the Oxford University Press.

Rob Knake is a senior research scientist in Cybersecurity and Resilience at the Global Resilience Institute and the Whitney Shepardson Senior Fellow at the Council on Foreign Relations. His work focuses on Internet governance, public—private partnerships, and cyber conflict, and his expertise includes developing presidential policy. Knake served from 2011 to 2015 as Director for Cybersecurity Policy at the National Security Council. In this role, he was responsible for the development of presidential policy on cybersecurity, and built and managed federal processes for cyber incident response and vulnerability management. Knake holds a master's in public policy from Harvard's Kennedy School of Government and undergraduate degrees in history and government from Connecticut College.

Vineet Kumar is the president and founder of the Cyber Peace Foundation. He is the recipient of eight international and seventeen national awards and accolades.

Rebekah Lewis, JD, CISSP, CIPP, is a cybersecurity governance, law, and policy expert. Her diverse professional experience includes serving as a practicing attorney for the US National Security Agency and with Latham & Watkins, as a university faculty member and the director of an academic research center in Washington,

DC, and on cross-disciplinary teams with the World Economic Forum and the International Telecommunication Union.

Cyanne E. Loyle is an associate professor of political science and a global fellow at the Peace Research Institute Oslo. Dr. Loyle is also the co-director of the Northern Ireland Research Initiative and co-creator of the Post-Conflict Justice and During-Conflict Justice databases. She is also the co-convener of the Rebel Governance Network. Loyle's current research focuses on transitional justice adopted during and after armed conflict. Her current projects include work on rebel judicial institutions, government use and misuse of transitional justice, and digital repression. Dr. Loyle received her M.A. in holocaust and genocide studies from Stockton University and her M.A. and Ph.D. in political science from the University of Maryland.

Renée Marlin-Bennett is a professor of political science at Johns Hopkins University in Baltimore, MD, USA. Her research focuses on the nature of political power, information flows, bodies and emotions, and borders. Her publications on this theme include numerous articles in scholarly journals, such as *International* Political Sociology, Critical Studies on Security, Art and International Affairs, and Journal of Information Technology and Politics; and four books: Science, Technology and Art in International Relations (Routledge, 2019); Alker and IR: Global Studies in an Interconnected World (Routledge, 2012); Knowledge Power: Intellectual Property, Information, and Privacy (Lynne Rienner, 2004); and Food Fights: International Regimes and the Politics of Agricultural Trade Disputes (Gordon & Breach, 1993, republished by Routledge Revivals). From 2017 to 2019, Marlin-Bennett served as the founding editor-in-chief of the Oxford Research Encyclopedia of International Studies, a peer-reviewed, joint publication of the Oxford University Press and the International Studies Association. Previously, she was the general editor (2013-2016) and co-general editor (2012-2013) of the predecessor publication, International Studies Online (Wiley), also known as the International Studies Compendium Project. From 1987 to 2007, she was on the faculty of International Relations at the School of International Service, American University, where she served as Division Director of International Politics and Foreign Policy. She earned her doctorate in political science from the Massachusetts Institute of Technology and her B.A. cum laude in international relations from Pomona College.

Scott J. Shackelford serves on the faculty of Indiana University where he is the cybersecurity program chair, as well as the Executive Director of the Ostrom Workshop. He is also an Affiliated Scholar at both the Harvard Kennedy School's Belfer Center for Science and International Affairs and Stanford's Center for Internet and Society, as well as a senior fellow at the Center for Applied Cybersecurity Research. Professor Shackelford has written more than 100 articles, book chapters, essays, and op-eds for diverse publications. Similarly, Professor Shackelford's research has

been covered by an array of outlets, including *Politico*, *NPR*, *CNN*, *Forbes*, *Time*, the *Washington Post*, and the *LA Times*. He is also the author of *The Internet of Things*: What Everyone Needs to Know (Oxford University Press, 2020), *Governing New Frontiers in the Information Age: Toward Cyber Peace* (Cambridge University Press, 2020), and *Managing Cyber Attacks in International Law, Business, and Relations: In Search of Cyber Peace* (Cambridge University Press, 2014). Both Professor Shackelford's academic work and teaching have been recognized with numerous awards, including a Harvard University research fellowship, a Stanford University Hoover Institution national fellowship, a Notre Dame Institute for Advanced Study Distinguished Fellowship, the 2014 Indiana University Outstanding Junior Faculty Award, and the 2015 Elinor Ostrom Award.

Adam Shostack is a leading expert on threat modeling, and a consultant, entrepreneur, technologist, author, and game designer. He is an affiliate professor at the Paul G. Allen School of Computer Science & Engineering at the University of Washington, an advisor to the UK's Research Institute in Socio-Technical Security, and an advisory board member at the *Journal of Cybersecurity* and the Privacy Enhancing Technologies Symposium. He's also a member of the BlackHat Review Board, and helped create the Common Vulnerabilities and Exposure (CVE) and many other things. He currently helps many organizations improve their security via Shostack & Associates, and helps start-ups become great businesses as an advisor and mentor. While at Microsoft, he drove the Autorun fix via Windows Update, was the lead designer of the SDL Threat Modeling Tool v3, and created the "Elevation of Privilege" game. Adam is the author of *Threat Modeling: Designing for Security* and the co-author of *The New School of Information Security*.

Jessica Steinberg is an associate professor in the Department of International Studies at Indiana University. Her research focuses on the political economy of development, local politics of natural resource extraction, territorial sovereignty, and violent conflict. Her book *Mines*, *Communities*, *and States*: *The Local Politics of Natural Resource Extraction in Africa* (Cambridge University Press, 2019) investigates the strategic interaction between international mining firms, states, and local communities to understand different governance outcomes in regions of natural resource extraction. Her next book-length project explores the use of common-pool resources (forestry in particular) in conflict and postconflict contexts to explore the effect of common-pool resource management participation on local stability. Other areas of interest include technologies of repression, conflict events reporting, and private investment in unstable regions.

Megan Stifel is Executive Director, Americas, at the GCA and the founder of Silicon Harbor Consultants, a firm that provides strategic cybersecurity operations and policy counsel. She is a nonresident senior fellow in the Atlantic Council's Cyber Statecraft Initiative. Prior to that Megan served as Cybersecurity Policy Director

at Public Knowledge. Megan previously served as Director for International Cyber Policy at the National Security Council (NSC), where she was responsible for expanding the US government's information and communications technology policy abroad, involving cybersecurity, Internet governance, bilateral and multilateral engagement, and capacity building. Prior to the NSC, Ms. Stifel served in the US Department of Justice (DOJ) as Director for Cyber Policy in the National Security Division and as counsel in the Criminal Division's Computer Crime and Intellectual Property Section. Before joining DOJ, Ms. Stifel was in private practice, where she advised clients on sanctions and Foreign Corrupt Practices Act (FCPA) compliance. Before law school, Ms. Stifel worked for the US House of Representatives Permanent Select Committee on Intelligence. She received a Juris Doctorate from the Maurer School of Law at Indiana University, and a bachelor of arts in international studies and German, magna cum laude, from the University of Notre Dame.

Jennifer Trahan is a clinical professor at New York University's Center for Global Affairs where she directs the concentration in Human Rights and International Law. She has published scores of law review articles and book chapters including on the International Criminal Court's crime of aggression. Her book, Existing Legal Limits to Security Council Veto Power in the Face of Atrocity Crimes (Cambridge University Press, 2020) was awarded the 2020 ABILA Book of the Year Award by the American Branch of the International Law Association. She has additionally authored: Genocide, War Crimes and Crimes Against Humanity: A Digest of the Case Law of the International Criminal Tribunal for Rwanda (Human Rights Watch, 2010) and Genocide, War Crimes and Crimes Against Humanity: A Topical Digest of the Case Law of the International Criminal Tribunal for the former Yugoslavia (Human Rights Watch, 2006). She serves as one of the US representatives to the Use of Force Committee of the International Law Association and holds various positions with the American Branch of the International Law Association. She also served as an amicus curiae to the International Criminal Court on the appeal of the situation regarding Afghanistan, and serves on the Council of Advisers on the Application of the Rome Statute to Cyberwarfare. She was recently appointed Convenor of the Global Institute for the Prevention of Aggression.

Brandon Valeriano is a senior fellow at the Cato Institute and a distinguished senior fellow at the Marine Corps University. Dr. Valeriano has published five books and dozens of articles. His two most recent books are *Cyber War Versus Cyber Realities*: *Cyber Conflict in the International System* (2015) and *Cyber Strategy: The Evolving Character of Power and Coercion* (2018), both with Oxford University Press. Dr. Valeriano has written opinion and popular media pieces for such outlets as *The Washington Post, Slate, Foreign Affairs*, and *Lawfare*. He has provided testimony on armed conflict in front of both the United States Senate and the Parliament of the United Kingdom. His ongoing research explores conflict escalation, big data in

cyber security, the cyber behavior of revisionist actors, and repression in cyberspace. He holds a Ph.D. from Vanderbilt University.

Ryan Walsh is a graduate of the Cybersecurity Risk Management Program at Indiana University-Bloomington who interned at the Global Cyber Alliance and currently works at the U.S. Department of State.