Ido Sivan-Sevilla May 6th, 2021

College of Information Studies University of Maryland 4130 Campus Drive (Hornbake Building) College Park, MD USA 20740 <u>sevilla@umd.edu</u> https://idonibrasco.github.io/

INTERESTS & HIGHLIGHTS:

I am an Assistant Professor at the College of Information Studies, University of Maryland. I am interested in comparatively analyzing institutional settings and policy developments for digital risk governance across nations, sectors, and contexts. I aim to test theories of the policy process on digital risk governance frameworks, while utilizing my technical information security experience to complement findings at the policy level with studies on how security & privacy threat actors are institutionalized 'on the ground.' I use process-tracing, thematic & inductive analysis, fuzzy set qualitative comparative analysis (fsQCA), and statistical analysis to reach my conclusions.

I hold a background in computer and social sciences, with eight years of experience in leading technical cybersecurity positions from the private sector, The Prime Minister's Office, and the Israeli Air-Force [Captain]. I was previously a postdoctoral fellow at Cornell Tech's Digital Life Initiative (DLI), MA Fulbright Scholar at the University of Minnesota and U.S. Congress Research Fellow in Washington DC. I had completed my BA with honors in Computer Science at the Technion – Israel's Institute of Technology.

I have published peer-reviewed journal articles on U.S. & EU policy processes and institutions that govern cybersecurity, privacy, and national security. I teach about theories of the policy process, public policies for the digital world, cybersecurity and privacy problems in our information society, information risk management, and created a class for designing and implementing honeypot technologies to capture the behavior of hackers.

EDUCATION

08/2014-08/2019 Ph.D. in Public Policy & Governance, Federmann School of Public Policy

and Government, The Hebrew University of Jerusalem. Academic

Supervisor: Prof. David Levi-Faur.

<u>Dissertation Title:</u> Explaining Policy Change in Governing Digital

Technology Risks: Longitudinal Analysis of US and EU Cybersecurity and

Privacy Policy Regimes (Approved – November 2019).

08/2012-08/2014 M.A in Public Policy, Global Policy Concentration, The Humphrey

School of Public Affairs, University of Minnesota. Academic Supervisor:

Prof. Brian J. Atwood. (GPA: 3.95/4.00)

Thesis: Whistleblowing in the Digital Age – A Comparative Analysis of

Whistleblowing Acts in U.S. and Israel.

10/2002-12/2005 B.A in Computer Science, **Technion – Israel's Institute of Technology**

(Dean's list of honors for Scholastic Achievements – top 10% of class).

Sivan-Sevilla: Page 1 of 7

RESEARCH EXPERIENCE BEYOND DISSERTATION

08/2019-01/2021 Postdoctoral Fellow at the <u>Digital Life Initiative (DLI) in Cornell-Tech</u>,

Cornell University, New York City, New York, U.S.

Host: Prof. Helen Nissenbaum

Research Project Title: Accountable Information Use - Privacy and

Fairness in Autonomous Decision-Making Systems.

04/2016-04/2018 Neubauer Research Fellow at the **Institute for National Security Studies**

(INSS), Tel Aviv University. Cybersecurity Research Program. Leading a research group with three M.A students from Harvard, LSE, and Tel-Aviv University to conduct a comparative analysis on cybersecurity policies in

U.S., EU, Israel, UK, France, and Germany.

08/2014-08/2016 Researcher in a multi-disciplinary group, funded by Israel's Ministry of

Science, to study the behavior of hackers. Designing and implementing

honeypot technologies to capture hackers' behavior.

10/2013-08/2014 Research Assistant at the Humphrey School of Public Affairs, University

of Minnesota. Working with Prof. Brian Atwood on U.S. institutions.

PUBLICATIONS

Peer-reviewed Scientific Journals

Sivan-Sevilla, I. (2020) "Europeanization on Demand: The EU Cybersecurity Certification Regime between Market Integration and Core State Powers [1997-2019]." *Journal of Public Policy*. DOI: 10.1017/S0143814X20000173. Summary available here.

Sivan-Sevilla, I. (2019). "Framing and Governing Cyber Risks: Comparative Analysis of US Federal Policies [1996-2018]", *Journal of Risk Research*. DOI:10.1080/13669877.2019.1673797

Sivan-Sevilla, I. (2018). "Complementaries and Contradictions: National Security and Privacy Risks in U.S. Federal Policy, 1968-2018", *Policy & Internet* 11(2): 172-214, DOI: 10.1002/poi3.189. Blog post about the article available here.

Siboni G. & I. Sivan-Sevilla. (2017). "Israeli Cyberspace Regulation: A Conceptual Framework, Inherent Challenges, and Normative Recommendations." *Cyber, Intelligence, and Security* 1(1):83-102. Available here.

Sivan-Sevilla, I. (2020). "Analytical Framework for Cyber Risk-Regulatory Models", *Haifa Law Review*. Paper was selected 5 out of 20 papers for a special issue on law & cyber policy. Available here (Hebrew).

Under Review:

Sivan-Sevilla I., W. Chu, X. Liang, H. Nissenbaum. "Unaccounted Privacy Violation: A Comparative Analysis of Persistent Identification of Users Across Social Contexts." Research was highlighted by Cornell University here.

Sivan-Sevilla, I. "Europeanization of Policy Implementation? A qualitative comparative analysis (QCA) of Data Protection Authorities' enforcement styles post-GDPR."

Work-in-Progress:

Sivan-Sevilla, I. "Cyber insurers as Regulators: Comparative Analysis of Risk Management Roles taken by Cyber Insurance Companies." Essay available here.

Sivan-Sevilla: Page 2 of 7

- Sivan-Sevilla, I. and Levi-Faur D. "From security governance to the regulatory security state: meta-analysis of the emergence of regulatory measures for national security in the EU."
- Sivan-Sevilla, I. and Nissenbaum H. "Contextual Information-seeking Behavior: A comparative analysis of privacy harms across the web."

Book Chapters

Sivan-Sevilla I. & S. Sharvit. "When Cybersecurity Meets the Regulatory State: Case-Study Analysis of the Israeli Cybersecurity Regulatory Regime". In Galnor I., E. Tevet, and V. Shiffer (eds.). *Regulation in Israel: Values, Effectiveness, Methods*. Available here.

Under Review:

Sivan-Sevilla I. "The Israeli Cybersecurity Challenge: Policy Regime Change [1998-2018]." In Avigur A. and I. Berkovich (eds.) *Public Policy in the Information Age*. Open University of Israel. Magness Books.

Peer-Reviewed Book-length Research Projects for Policymakers

- Siboni G. & I. Sivan-Sevilla. (2018). "Cybersecurity Regulations at the Private Sector: A Comparative Analysis of U.S., EU, UK, France, Germany, and Israel." *INSS: Tel-Aviv, Israel*. Available here.
- Sivan-Sevilla, I. & T. Shwartz-Altshuler. (2021, Forthcoming). "What is Cyber? A Guide to Policymakers." *The Israel Democracy Institute*, Jerusalem (Hebrew).

Peer-reviewed Conference Proceedings

- Sivan-Sevilla, I. (2017). "<u>Trading Privacy for Security in Cyberspace: A study Across the Dynamics of U.S. Federal Laws and Regulations Between 1967 and 2016</u>." *9*th International Conference on Cyber Conflict (CyCon). IEEE, pp. 1-19. Available here.
- Rechavi, A., T. Berenblum, D. Maimon, I. Sivan-Sevilla. (2015). "<u>Hackers Typology Matter</u> <u>Geography: Mapping the Dynamics of Repeated System Trespassing Events Networks.</u>" *IEEE/ACM International Conference on Advances in Social Network Analysis and Mining.*

Non-Refereed Articles and Essays

- "Private-Interest Cybersecurity Governance: The Case of Cyber Insurers," Cornell Tech Blog, 16 Dec 2020.
- "The Role of the State in the Private Sector Cybersecurity Challenge" (co-author), Georgetown Journal of International Affairs, 27 May, 2018.
- "The Double Standard of the State in Cybersecurity" (Hebrew), *TheMarker*, 3 March, 2017.
- "The FCC's Latest Privacy Regulations: A New Stance on Private Sector Protections?", The Columbia Science and Technology Law Review, 12 December, 2016.
- "Apple vs. The FBI: The War on Privacy and Security" (Hebrew), Calcalist, 6 March, 2016.
- "The EU-US Fight for Privacy" (Hebrew), INSS Blog, 9 February, 2016.

AWARDS, FELLOWSHIPS, GRANTS, AND HONORS

| 11 WILLDS, I EEEO | VISITES, GREATES, THE HORORS |
|-------------------|--|
| 2020-2023 | Government of Singapore: AI & Public Opinion Research Grant (Collaborator, €55,000) |
| 2019-2021 | ISEF Foundation Postdoctoral Fellow (€8,600 Annually). |
| 2016-2019 | <u>Azrieli</u> Foundation: Graduate Studies PhD Fellowship (€87,560 for three years). Each year 15 PhD students are selected from the entire country. |
| 2016-2019 | The <u>Hoffman</u> Leadership and Responsibility Program PhD Fellowship at the Hebrew University of Jerusalem (€43,000 for three years). Each year 12 doctoral students are selected from the entire university. |
| 2016-2018 | Institute of National Security Studies (INSS) <u>Neubauer PhD Fellowship</u> <u>Program</u> . (€28,700 for three years) |
| 2017 | <u>Top Student Paper</u> - Seventh Annual International Symposium, Center for Digital Ethics and Policy, Loyola University Chicago. |
| 07/2017 | Leonard Davis Institute Fellowship for <u>Oxford Internet Institute Summer</u> <u>Doctoral Program</u> . (€2,580) |
| 2016 | European Forum at the Hebrew University Fellowship. (€860) |
| 06/2016 | Ortwin Renn Prize for Applied Risk Research - European Society for Risk Analysis (SRA-E) (€473). |
| 2015 | The Federmann School of Public Policy and Government, PhD Fellowship for Excellence in Studies. (€14,370) |
| 05-08/2013 | Rosenthal Fellowship for Placement as a Legislative Assistant at the U.S. Congress. (€6,450) |
| 2012-2014 | U.S. Department of State, Fulbright Scholarship for MA at the Humphrey School of Public Affairs, University of Minnesota. (€130,000) |
| 2004-2005 | Technion – Israel's Institute of Technology. Dean's list of honors for Scholastic Achievements. |
| 2002-2005 | Israeli Defence Forces (IDF), Scholarship for BA in Computer Science at the Technion – Israel's institute of Technology. (€26,000) |

TEACHING EXPERIENCE

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| 2015-2019 | Teaching Assistant, "Conceptual and Theoretical Issues in Public Policy", Graduate level, Israel's Cadets Program (Future Policymakers), The Federmann School of Public Policy and Government, The Hebrew University of Jerusalem . |
| 2015-2017 | Teaching Assistant, "Theories of the Public Policy Process" Graduate level, M.A. Program, The Federmann School of Public Policy and Government, The Hebrew University of Jerusalem . |

PROFESSIONAL POSITIONS

| 05-08/2013 | Legislative Assistant at the U.S. House of Representatives , Office of Congressman Ami Bera (CA-07), <u>The Rosenthal Fellowship Program</u> . |
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| 09/2011-08/2012 | Technical Cybersecurity Projects' Leader, The Prime Minster Office, The Government of Israel . |

Sivan-Sevilla: Page 4 of 7

MILITARY & LEADERSHIP EXPERIENCE

| 2009-2011 | Cybersecurity Team Leader [Captain], Israeli Air Force (IAF), <u>'Ofek' – IAF's Technological Unit</u> . Responsible for securing IAF's operational digital infrastructures. Managing a team of 11 programmers and consultants with a budget of \$7M. Team was chosen for excellence in 2010. |
|-----------|---|
| 2007-2009 | Cybersecurity Team Member [Lieutenant], Israeli Air Force , 'Ofek' – IAF's Technological Unit. |
| 2005-2007 | Information Technology Knowledge Manager, Israeli Air Force (IAF), Pilot's Training Academy. |

PRESENTATIONS AT INTERNATIONAL CONFERENCES

(2020) "Unaccounted Privacy Violation: A Comparative Analysis of Persistent Identification of Users Across Social Contexts." FTC Privacy Con 2020. Agenda is here. Video of Presentation [3:41:30].

(2018) "Regulating Emerging Technologies in the EU: Online Advertising as an Emerging AI Technology that Threatens Cybersecurity and Privacy", *AI Law & Policy*, The Center for Cyber Law & Policy, University of Haifa (*invited*). Video of panel here.

(2018) "Reasserting Government in the Age of Governance: An Analysis of the U.S. Cyber Security Risk Regimes", *Society for Risk Analysis (SRA) 2018 Annual Meeting*, New Orleans, Louisiana, United States (*invited*).

(2018) "A Broken Distribution of Privacy: Evaluation of the Commodification of Personal Information Across Market Segments", *Amsterdam Privacy Conference*, The University of Amsterdam (*invited*).

(2018) "U.S. Cybersecurity Risk Regulation Strategies", <u>Digital</u>

State Capacities Workshop, Hertie School of Governance, Berlin, Germany, 20 March.

(2017) "The Politics of U.S. Cybersecurity Risk Governance", *The 13th Annual Graduate Conference in Political Science, International Relations, and Public Policy*, The Hebrew University of Jerusalem, 13-14 December.

(2017) "Dynamic Policy Goals: Security and Privacy in U.S. Laws and Regulations", <u>Seventh Annual International Symposium on Digital Ethics</u>, Center for Digital Ethics and Policy, Loyola University Chicago, 13 October.

(2017) "Trading Privacy for Security? A Study Across the Dynamics of U.S. Federal Policy Regimes in Cyberspace", 3rd International Conference on Public Policy, Lee Kuan Yew School of Public Policy (NUS), Singapore. 28-30 June

(2017) "Trading Privacy for Security in Cyberspace: A Study Across the Dynamics of U.S. Federal Laws and Regulations", 9th International Conference on Cyber Conflict (CyCon), NATO

Cooperative Cyber Defence Center of Excellence (CCDCOE), Tallin, Estonia. 30 May - 2 June. Video of presentation available <u>here</u>.

(2016) "The Rise of the U.S. Digital Surveillance State", *The 12th Annual Graduate Conference in Political Science, International Relations, and Public Policy,* The Hebrew University of Jerusalem, 13-16 December.

(2016) "U.S. Cybersecurity With/Out Privacy", *The 25th Meeting of The European Association for Risk Analysis*, University of Bath, UK, 19-22 June.

(2016) "Israeli Cybersecurity Regulation", *The 18th Annual Conference of the Israeli Political Science Association (IPSA)*, Jerusalem, 26 May.

REFEREE FOR JOURNALS / BOOK SERIES

Regulation & Governance (Wiley)

Security Dialogue (SAGE)

Digital Policy, Regulation and Governance (Emerald Publishing)

MIT Press: The Information Policy Series

ACADEMIC WORKSHOPS (Invited as Speaker & Reviewer)

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| 05/2021 | The 8th Privacy, Cyber & Technology Workshop, Tel Aviv University |
| 01/2021 | Institute for Information Law (IViR), University of Amsterdam: <u>Governing European values inside data flow</u> |
| 12/2020 | ECPR RegGov Early Career Network (ECN) |
| 11/2020 | Joel R. Reidenberg Northeast Privacy Scholars Workshop |
| 12/2019 | Interactions between Private and Public Authority in Global (Business) Governance: comparative and inter-disciplinary perspectives. University of Melbourne – hosted by Prof. Macdonald . |
| 11/2019 | Power Sharing or Power Shifts? Examining the role of public-private interactions in global governance. Technical University of Munich (TUM) School of Governance. |
| 01/2019 | Risk Regulation & Society, Lorentz Center, Institute of Public Administration, Leiden University, The Netherlands. |
| 2017-2018 | Privacy and the Capitalism of Information, Bi-monthly Workshops, Faculty of Law, Tel Aviv University. |
| 01/2018 | Private Authority and Public Policy in a Global Context. Yale University. |
| 04/2015 | The Second Privacy, Cyber, and Technology Workshop, Faculty of Law, Tel Aviv University. |

MEMBERSHIPS IN PROFESSIONAL ASSOCIATIONS

<u>Israeli Public Diplomacy Forum</u> (IPD) (two years)

International Public Policy Association (IPPA) (five years)

Society for Risk Analysis (SRA) (four years)

Israel Political Science Association (ISPA) (four years)

Sivan-Sevilla: Page 6 of 7

GUEST LECTURER

| 2020 | Seminar Presentation at Cornell Tech: <u>AdTech & Our Privacy – Dark</u> <u>Present, Brighter Future?</u> Video of the talk is <u>here</u> . |
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| 2020 | Research presentation at the <u>University of Coventry (UK)</u> in a module on 'Artificial Intelligence, Creativity, and Ethics' [Undergraduate]. Seminar topic: "Privacy as Contextual Integrity: Highlighting Industry and Policy Failures Through the case of Digital Advertising." |
| 2020 | Seminar at ETH Zurich: Approaches to Authentication and Security |
| 2017 | Inter-American Development Bank & The Hebrew University of Jerusalem. <u>Cybersecurity Executive Training with policymakers from Latin America</u> . |
| 2017 | Israeli Public Diplomacy (IPD) Forum. <u>Six invited lectures</u> and <u>TV</u> <u>Interviews</u> on cybersecurity in U.S., Florida, <u>with business and community leaders</u> . Deception-based Security lecture available <u>here</u> . Evaluation letter <u>here</u> (Hebrew). |
| 2017 | Teldan's Information Systems Conference. Invited lecture on "the tension between security and privacy in cyberspace." |
| 2016 | Yigal Arnon (Law firm) Annual Meeting. Invited lecture on: "Implications of open-source principles on cybersecurity: Linux-based cases." |

PROGRAMMING LANGUAGES

C++, Python, R, SQL, Stata, JavaScript

OUTREACH & COMMUNITY LEADERSHIP ACTIVITIES

| 2016 – Present | Working with Israeli Policymakers from the National Cyber Directorate to form policy solutions for cybersecurity challenges |
|----------------|--|
| 2014-2019 | Community leadership at the Wizo Institute in Jerusalem – Leading a <u>helpline for violent men</u> to mitigate family violence. |
| 2012 | <u>"Push" Program</u> - Tutoring high school students from low socio-economic classes. |
| 2011 | <u>"Tzeva - Youth Building A Future"</u> - supporting students from struggling regions in Israel. |
| 2011 | Amit Program – Jewish Agency. "Hillel" training program for collaboration with Jewish students in the U.S. |
| 2003-2005 | Perach - Tutorial Project |

Sivan-Sevilla: Page 7 of 7