Investigating targeted espionage: Methods, findings, implications

ISTAS21 Keynote Address on Thursday October 28th, 2021, 11am–12pm (EDT)

Speaker

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***Program Description*—The Citizen Lab has been undertaking investigations into targeted espionage for well over a decade. This path-breaking research has uncovered widespread global harms and an alarming spread of authoritarian practices across borders connected to a burgeoning and widely abused commercial surveillance industry. In his keynote, Deibert explains the methods, findings and implications of the Citizen Lab's research for human rights and global security.**

Keywords— Cybersecurity, security, privacy, mercenary firm, spyware, civil society, Pegasus, despotism

Deibert's keynote focused on contemporary digital security concerns especially within the realm of targeted espionage. Deibert opened with a discussion of recent zero-click, zero-day attacks affecting Apple users. This type of attack was carried out using the Pegasus 'spyware' software offered by the Israel-based NSO Group. After discussing various tragic attacks against academics, journalists, reporters and news anchors made possible by Pegasus, Deibert affirmed the unfortunate reality that this is only one piece of spyware among many being marketed to bad actors.

As the founder and director of the Citizen Lab, Deibert and his team work with victims to conduct research and report on mercenary firms like the NSO Group. He described the misuse of such software by both government and non-governmental organizations to target those who are openly critical of them. After a rundown of some of the other firms the Citizen lab has reported on, Deibert proffered the bleak conclusion that the commercial spyware market "is one of the most serious crises of global civil society of liberal democracy that we face right now." He then discussed the cases of three victims of Pegasus attacks and identified their common thread—social engineering used to make malicious links seem benign and enticing.

Deibert identified the main issue facing the realm of digital security regarding the growing commercial spyware market as a lack of clear accountability or legislation. Identifying the groups responsible as criminals or terrorists is a difficult task and one bound to differ between observers and legal jurisdictions. Complicating this is the fact that increasingly these cyber-attacks are aimed at civil society, i.e., private citizens. Though government and industrial espionage is to be expected, the average citizen does not have the resources or expertise to defend themselves against such attacks. He describes the nature of these attacks to be a kind of despotism for sale and discusses the types of services offered by these spyware firms including data analysis, data interception, social media scraping, packet tracing and more.

Throughout his address, Deibert stressed the importance of government action and legislation to regulate spyware and the commercial spyware market. However, he also recognized that governments and law enforcement services usually have a stake in the development of these technologies, creating conflicts of interest. During the question-and-answer period, when asked why bad actors like executives of the NSO Group are not being actively investigated or charged with criminal offenses, Deibert acknowledged that governments are slow to wake up to the urgency of establishing protocols for cybercrime. Canada, in particular, has done very little to lead the global initiative in this capacity despite having one of its own permanent residents (a colleague of Jamal Khashoggi) hacked while in Quebec and the Citizen Lab, working out of Toronto, continuing to publish high-profile reports on such nefarious activity. Ultimately, Deibert argued that the way forward lies in a multi-pronged community approach—legislative, academic, activism-based—that pushes for greater attention and regulation from all sides.

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