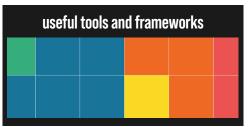


IST's Efforts on the Nexus of Al and National Security

We work with a diverse range of stakeholders across the Al ecosystem to produce:







Implications of AI for national security and global stability: IST's efforts to understand the implications of AI began in 2017, with a roundtable featuring leading policymakers and developers on a workshop on AI's impact on national security issues. In 2018, IST undertook a joint initiative with Lawrence Livermore National Laboratory's Center for Global Security Research that aimed to articulate, understand and manage the long-

term opportunities and risks posed by Alrelated technologies for international security, global stability, and warfare.





Accelerating multi-stakeholder coordination to mitigate the emerging risks of AI: As highly advanced artificial intelligence (AI) systems become increasingly integrated into critical aspects of society—from healthcare and finance to transportation and national security—policymakers and broader society are paying closer attention to the potential risks and opportunities associated with their development and deployment. With the support of the Patrick J. McGovern Foundation, IST engages with a diverse range of stakeholders across the AI ecosystem to better understand the

emerging risks of Al foundation models and to develop technical and policy oriented risk reduction strategies, driving forward responsible innovation.







2017 2018 2019 2020 2021 2022 2023 2024 2029

Al and ML integration into nuclear command, control and communications (NC3) systems: In January 2019, in collaboration with the Nautilus Institute for Security and Sustainability and Stanford University's Preventive Defense Project, IST hosted a multi-stakeholder discussion on the modernization of global NC3 systems. Building on this, IST convened scientists, engineers, policymakers, and academics to examine policy tools that could mitigate the risks posed by the integration of Al into NC3 systems. With the support of the State Department's Bureau of Arms Control, Verification, and Compliance and in partnership with Sandia National Laboratories, IST proposed confidence-building measures to limit the use of Al in weapon systems, encourage the creation of norms around the use of Al, increase lines of effective crisis communication, and bolster collaboration between

private industry and government. As applications of Al tools continue to advance and its integration with NC3 systems and subsystems intensify, IST with the support of Longview Philanthropy has embarked on an initiative to raise awareness, foster dialogue, and establish frameworks for stable and predictable practices for Al-NC3 applications.



Implications of AI in cybersecurity: With the support of Google.org through its Digital Futures Project, IST is studying the applications of AI in cybersecurity and implications for the offense-defense balance. IST aims to provide a clear picture of current cybersecurity trends, cutting through marketing hype to offer a future outlook and actionable recommendations. This effort is part of a broader IST project to identify key cybersecurity areas needing focus, such as threat intelligence, automated defenses, and

scalable security solutions. IST also co-leads a complementary effort with the World Economic Forum's Centre for Cybersecurity to understand the implications of Al in the cybercrime ecosystem.

