AISD2019 conference

Call for research papers

Artificial Intelligence in Security and Defence

<u>26-29 March 2019</u>

Artificial Intelligence (AI), Cloud Computing, Blockchain, IoT/IoE, Big Data, and digital transformation are the most dramatic technological game changers of all time. These smart technologies are expected to have a disruptive impact on public and private sectors. Defence and security are not an exception (Sukman, 2015). Indeed, smart technologies are changing defence and security and will enable intelligent warfare in the decades to come (Sloan, 2015; Work and Brimley, 2014).

But how exactly will defence and security be affected?

Researchers argue that intelligent technologies may have a profound transformational impact on defence both on the strategic and on the operational levels. On the strategic level, defence was about armed force against armed force (A2A). Recently, defence is moving toward one "whole-of-government and whole-of-society" against another (D2G&2S) (De Spiegeleire, Maas, and Sweijs, 2017). On the operational level, AI can create a more intelligent and autonomous force, can enhance platforms, munitions while enabling faster operational decisions and better combat outcomes (Hoadley and Lucas2018).

On another level, cyber security is becoming a major challenge as government agencies, corporations and individuals have increasingly become victims of cyber-attacks. With global cyber spending expected to reach $170 billion by 2020, cybersecurity is becoming one of the major security challenges.

<u>AISD2019</u>:

The Research and Strategic Studies Centre (RSSC) in the Lebanese Armed forces jointly with the "Lebanese Association for Information Systems" (LAIS) in Beirut, the "Middle East and North Africa Association for Information Systems" (MENA-AIS), and the "Information and Communication Technologies in Organizations" (ICTO) in Paris organize a conference entitled "Artificial Intelligence in Security and Defence" (AISD 2019) that will be held in March 2019.

The AISD2019 conference is the first of its kind concerning smart technologies, shedding light on how these technologies were, are, and will be designed, adopted, and adapted by the defence sector. The main focus will be on the impact of these smart Systems on the strategic, operational, and technical levels.

The AISD 2019 conference invites researchers, academics, specialists, and IT companies to participate in the submission of scientific and technical studies and research in various areas

of smart and informational technology in the security and defence sectors, especially innovative and rigorously developed conceptual, empirical contributions, applications, and deployment strategy and requirements. It also encourages multi-disciplinary research focusing on Intelligence for national security and counter terrorism, cyber and traditional warfare, and logistics and support.

The conference will also host workshops providing the AI community with the opportunity to meet, brainstorm, and exchange ideas on specific AI research themes (Cloud Computing, Blockchain, IoT/IoE, Big Data, Digital Transformation…) related to defence and security.

Topics (but not limited to):
- Legal framework (local and international) and ethics.
- Big data and AI for defence, security and Public sector.
- Smart technologies to improve security against terrorism.
- Application of Big Data Analytics against risk index in defence, security and public sector.
- AI and Big Data's role in Cyber security, cyber and traditional warfare.
- AI and Big Data Applications in counter-terrorism, pre and post attacks.
- AI role in security engineering process.
- AI role in counter-espionage.
- AI role in mobile phone security and data tracking.
- AI and threat modelling in defence and security.
- AI distributed design and implementation for security and defence.
- AI human-centred design for security and defence.
- Data Mining in defence, security and public sector.
- Artificial Intelligence implementation, adoption, adaptation by armed forces.
- Digital transformation and Inter-organisation data sharing.
- The role of social media intelligence and analysis in defence and security.
- AI and deep learning to identify terrorist propaganda.
- ERP and Innovation in defence and security (HR, Supply Chain, Logistics and support …).
- IoT/IoE and their role in the global defence.
- IoT/IoE in the public sector.
- AI as strategic tool for advanced warfare.
- Blockchain and cyber security.
- Blockchain and Digital Currencies in defence, security and public sector.
- Smart Buildings/Cities in defence, security and public sector.
- Digital Forensics.

Important dates and useful information:

- Deadline for submission: 15/01/2019
- Notification of acceptance: 20/02/2019
- Camera ready paper: 15/02/2019
- Conference: 26-29/03/2019
- For Visa requirements, a copy of the researcher's passport is needed before 15/01/2019 (aisd2019@army.gov.lb)

Location: Le ROYAL Hotel - Beirut

Research paper template   **https://goo.gl/vzVaJh**

Research paper submission: https://easychair.org/conferences/?conf=aisd2019

References

Work, R. and Brimley, S.(2014), *20YY Preparing for War in the Robotic Age*,Center for a New American Security, January 2014.

Sukman, D. (2015), Lethal Autonomous Systems and the Future of Warfare, *Canadian Military Journal*, (16:1), 44-53.

Sloan, E. (2015), Robotics at War, *Survival*, (57:5), 107-120.

De Spiegeleire, S., Maas, M., Sweijs, T. (2017),Artificial Intelligence and the future of defense, The Hague Centre for Strategic Studies, The Netherlands.

Hoadley, D., Lucas, N. (2018), *Artificial Intelligence and National Security*, Congressional Research Service, USA.