

United Service Institution of India (USI)
'USI–Gold Medal Essay Competition 2026'

Subject: Role of Artificial Intelligence in Enhancing Operational Effectiveness of the Indian Armed Forces

Concept Note

General

1. The USI - Gold Medal Annual Essay Competition seeks to stimulate rigorous analysis and original thought on the role of Artificial Intelligence (AI) in transforming the operational effectiveness of the Indian Armed Forces. As contemporary warfare becomes increasingly data-intensive, multi-domain, and time-compressed, AI-enabled systems are emerging as critical enablers of faster decision-making, enhanced situational awareness, precision engagement, predictive logistics, and resilient command and control. The integration of AI across sensors, shooters, networks, and decision-support architectures offers the potential to fuse human judgment with machine speed, scale, and consistency. Examining AI as a force-multiplier therefore requires not only technological understanding, but also doctrinal adaptation, organisational change, and a reassessment of command responsibility, ethics, and human–machine collaboration.

Objective of the Competition

2. The competition aims to:
- (a) Institutionalise an Annual Essay Competition under the aegis of the United Service Institution of India to promote sustained intellectual engagement with Artificial Intelligence and its implications for military operations and national security.
 - (b) Encourage rigorous analysis and original thinking on the operational, doctrinal, and strategic dimensions of AI adoption across the spectrum of conflict.
 - (c) Foster a culture of professional military education and scholarly inquiry among serving officers on technology-driven transformation of warfare.
 - (d) Bridge operational experience and strategic theory by examining command-and-control models, decision-making frameworks, and human–machine interaction in AI-enabled operations.
 - (e) Promote informed debate on opportunities, risks, and ethical challenges associated with military AI, while reaffirming the primacy of human judgment and command responsibility.
 - (f) Contribute to policy- and doctrine-relevant discourse by generating research-based insights to inform future force structure, capability development, and employment concepts for the Indian Armed Forces.

Background and Context

3. Artificial Intelligence (AI) is rapidly emerging as a decisive enabler in modern warfare, reshaping how military forces plan, decide, and execute operations. For the Indian Armed Forces, operating across diverse and contested land, maritime, air, cyber, and space domains, AI offers the ability to process vast volumes of data at

machine speed, convert information into actionable intelligence, and compress decision-making cycles. By augmenting human cognition with algorithmic analysis, AI strengthens situational awareness, improves precision, and enhances the tempo and effectiveness of military operations.

4. One of the most significant contributions of AI lies in intelligence, surveillance, and reconnaissance (ISR). AI-enabled systems can fuse data from satellites, drones, sensors, and open-source feeds to identify patterns, detect anomalies, and generate real-time threat assessments. This enables commanders to gain a more comprehensive and accurate operational picture, anticipate adversary actions, and allocate forces more effectively. In complex and data-dense environments, such capabilities are critical to maintaining information superiority.

5. AI also enhances operational effectiveness through decision-support and command-and-control systems. By modelling multiple courses of action, predicting outcomes, and highlighting risks, AI-assisted tools enable faster and more informed decisions, particularly in high-tempo and contested scenarios. This does not replace human judgment, but rather strengthens it by providing commanders with deeper analytical insight and greater confidence in their choices.

6. In the domain of operations and logistics, AI-driven predictive maintenance, supply-chain optimisation, and resource management improve force readiness and sustainability. Anticipating equipment failures, optimising spares inventory, and streamlining movement of men and material reduce downtime and increase operational availability. Similarly, AI-enabled targeting and precision engagement systems can enhance accuracy, reduce collateral damage, and improve the effectiveness of limited resources.

7. At the same time, the integration of AI presents challenges related to reliability, cybersecurity, ethical employment, and command responsibility. The Indian Armed Forces must therefore pursue a balanced approach—investing in indigenous AI capabilities, robust testing and validation, resilient networks, and clear doctrinal guidance. When responsibly integrated, Artificial Intelligence can serve as a powerful force multiplier, strengthening India's deterrence posture and enabling its Armed Forces to operate with greater speed, precision, and effectiveness in an increasingly complex security environment.

8. Against this backdrop, the essay competition invites participants to critically examine how Artificial Intelligence can enhance the operational effectiveness of the Indian Armed Forces, with particular attention to doctrine, organisation, training, leadership, and jointness.

Aim of the Essay

9. To stimulate informed and original analysis on how Artificial Intelligence can be leveraged to enhance operational effectiveness of the Indian Armed Forces, while balancing technological integration with human judgment, ethical responsibility, and effective command and control.

Suggested Approach and Essay Structure

10. Participants may adopt their own analytical framework; however, the following indicative structure may be useful:

- (a) Introduction
- (b) Evolution of Warfare and the Emergence of AI
- (c) Operational Applications of AI Across Domains
- (d) Advantages and Opportunities

- (e) Challenges, Risks, and Ethical Considerations
- (f) Implications for Doctrine, Organisation, and Capability Development
- (g) Relevance for India and Future Conflicts
- (h) Conclusion

Expected Outcomes

11. Essays should demonstrate clarity of thought, analytical depth, and originality. Participants are encouraged to move beyond descriptive narratives and engage critically with emerging concepts, drawing upon doctrinal sources, contemporary case studies, and strategic reasoning.

Conclusion

12. Artificial Intelligence lies at the intersection of technology, strategy, and human decision-making. By engaging with this theme, participants contribute to shaping informed discourse on how India's Armed Forces can adapt, innovate, and prevail in future conflicts.

Rules and Regulations

13. The competition is open to all **commissioned officers, of the Defence Services of India, officers of the Territorial Army, Assam Rifles and the Senior Division of the National Cadet Corps, and Gazetted Officers of the Civil Administration in India including retired officers.**

14. Each essay submitted must be an **original work authored by a single individual. Joint authorship is not permitted. Proper citation of all sources is mandatory** and must follow the **prescribed format**. Any entry found guilty of **plagiarism** will be **disqualified**, and **disciplinary action may be recommended**, where applicable.

15. Essays must be written in **English** and must **between 3000 to 4000 words, excluding endnotes**. The **total word count must be clearly mentioned in brackets** at the end of the essay. Entries that **exceed the word limit or fail to specify the word count** are **liable to rejection**.

16. The manuscript must be **typed, double-spaced, and printed on one side of the paper only**. The essay should be **logically structured** and organised with clearly defined **Group, Paragraph, and Sub-paragraph headings**. It must include an **Abstract of approximately 150 words**, followed by an **Introduction** and a **Conclusion**. The use of **proper endnotes is compulsory**, and essays **lacking them will not be evaluated**.

17. **Three hard copies** of the essay must be submitted along with a **soft copy sent by email**. Essays will be **evaluated only after receipt of both hard and soft copies**, as this is essential for **plagiarism checks**. Hard copies must be addressed to the **Director General, United Service Institution of India, Rao Tula Ram Marg, Post Bag No. 8, Vasant Vihar PO, New Delhi – 110 057**. The soft copy must be emailed to cpl.essays@usiofindia.org. The **submission deadline** for both hard and soft copies is **15 September 2026**. **Late submissions will not be accepted**.

18. All hard copy submissions must remain **strictly anonymous**. **No identifying details of the author** should appear anywhere in the essay or the covering letter. Each participant must select a **MOTTO (not exceeding ten words)** and type it on the **first page of all copies** of the essay. A **sealed envelope** must accompany the submission, containing a sheet with the **MOTTO, personal number (where**

applicable), rank, name, date of commission and unit address (as applicable), email address, and contact number, along with a brief curriculum vitae of approximately 80 words. Only the MOTTO should be written on the outside of the envelope. These envelopes will be opened during the USI Council meeting after the judges' decision. Any violation of the anonymity requirement will result in rejection.

19. For the soft copy submission, the **subject line of the email must be the selected MOTTO**. The body of the email should contain only the line: *"My entry for the USI Gold Medal Essay Competition is attached."* No signature block or additional text should be included.

20. The essays will be evaluated by a **panel of three judges nominated by the United Service Institution of India**. Assessment will be based on **originality and freshness of insights, depth of understanding of the subject, logical development and coherence of thought, quality of language and expression, correct and consistent use of footnotes and bibliography, and suitability of the essay, in whole or in part, for publication**. The decision of the judges shall be final.

21. The judges may recommend a **First Prize**, comprising a **Gold Medal**, a **cash award of ₹15,000**, a **certificate**, as well as a **Runner-up Prize** carrying a **cash award of ₹10,000** and a **certificate**. Both winners will get a **gratis Life Membership of the United Service Institution of India**. The **results of the winning essays will be published in the USI Journal and the USI website**. The articles will also be published in the USI Journal, if recommended by the evaluators.

22. The **copyright of all submitted essays shall vest with the United Service Institution of India**.

23. For any **queries or clarifications**, participants may contact the **Director Centre for Publications and Library** at cpl.essays@usiofindia.org

Style Sheet

24. General.

(a) **Font style** should be **Arial**, **Font Size – 12** (**Font Size – 10** for **endnotes**), with **double spacing** throughout the text.

(b) All **diagrams, charts, and graphs** should be referred to as **'Figure'**, **'Table'**, or **'Graph'** and must be **consecutively numbered**. **Tables** should carry **only essential data** and must **complement the text**, not repeat it. Each should have a **short title**, a **figure/table number**, and the **source mentioned at the bottom**.

(c) The essay should be structured using **Group, Paragraph, and Sub-paragraph headings** to enhance readability. **Introduction and Conclusion as Group Headings are mandatory**. The essay must also include an **Abstract of approximately 150–200 words**, placed **before the Introduction**.

(d) **English (UK)** or **English (India)** spellings must be used consistently throughout the essay.

(e) **Dates** should be written beginning with the **day**, followed by the **month**, and then the **year** (e.g., **11 Sep 2014**). Only the **first three letters of the month** should be used (e.g., **Jan, Feb, Sep**).

- (f) There should be **no paragraph numbering**. **Bullets** may be used where required. **Underlining is not permitted** anywhere in the text.
- (g) **Numbers** should be written **in words up to nine**, and **in numerals from 10 onwards** (e.g., *two, four, nine; then 10, 11, 12*).
- (h) The term **'per cent'** must be used instead of **%** or **percent**.
- (i) **Acronyms and abbreviations** must be written in **full at first mention**, followed by the **abbreviation in brackets**. Thereafter, only the **abbreviated form** should be used. **Do not create an acronym** if the word appears **only once** in the text.
- (j) Any **text written in a language other than English** should be written in **italics**, with the **meaning provided in brackets** alongside.
- (k) While referring to **currency**, use the following formats:
- (i) **INR 2,000 cr** (not *2000 crores of rupees*)
 - (ii) **USD 8.5 mn** (not *8.5 million dollars*)
 - (iii) Currency abbreviations must follow this standard: **Million – mn, Billion – bn, Crores – cr**.
- (l) For **emphasis**, words should be placed within **single quotation marks only at first mention**. If the emphasis involves **two words**, both should begin with **capital letters**. If it involves **more than two words**, **only the first word should be capitalised**.
- (m) **Statements by another person** should be enclosed within **double quotation marks**. **Punctuation marks** should appear **inside the quotation marks**, while the **full stop** should be placed **outside**.

25. End Notes.

- (a) Authors are encouraged to provide **complete bibliographic details** of all **books, articles, journals, and other sources** cited, as **endnotes**. This should include the **full name of the author, title of the book or article, journal name** (for articles), **issue details**, and **page numbers**. In addition to endnotes, a **bibliography may be included**, if desired. The use of **Wikipedia** as a reference must be **avoided**.
- (b) When referring to a **book**, follow the format below:
- (i) **Lt Gen CK Kapur**, *Chinese Military Modernisation*, (New Delhi: **Manas Publications, 2003**), **17–18**.
 - (ii) When referring to a **journal article**, follow the format below:
 - (iii) **Lt Cdr Neeraj Malhotra**, "Pratap Singh of the Indian Legion", *The Journal of the United Service Institution of India*, **Vol. CXXXIV, No. 556**, p. **283**.
- (c) When referring to a **website**, follow the format below:
- "Escalation Control in a Nuclear Environment"**, *Report of a Seminar organised by the Institute of Peace and Conflict Studies on 17 Nov 2004 at New Delhi*. Available at: www.ipcs.org. Accessed on: 08 Feb 2005.
- (d) If **two successive citations** refer to the **same source**, use **ibid**.
- (e) If a source is cited again **after intervening references**, use the **author's name followed by 'op. cit.'**, for example: **Imran Khan, op. cit.**
- (f) **Avoid use of Wikipedia as a reference.**

26. The style sheet available at <https://www.usiofindia.org/publications.php?category=7> can also be referred to.