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Agentic Artificial Intelligence: Strategic Adoption in the U.S. Department of Defense

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About

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TI Research

A chief service of the DoDIAC is free technical inquiry (TI) research limited to four research hours per inquiry. This TI response report summarizes the research findings of one such inquiry. Given the limited duration of the research effort, this report is not intended to be a deep, comprehensive analysis but rather a curated compilation of relevant information to give the reader/inquirer a "head start" or direction for continued research.

Abstract

Agentic artificial intelligence (AI) is emerging as a transformative capability for the U.S. Department of Defense (DoD). Agentic AI systems can execute complex tasks independently. Unlike traditional AI, these agents can proactively analyze data, make decisions, and act with minimal human intervention. Within the DoD, the concept of agentic warfare reflects a growing shift from isolated AI tools to integrated systems designed for strategic, operational, and tactical applications. This report reviews key developments, including current DoD use cases and reasoning for broader AI implementation. While agentic AI offers advantages in speed and scale, it also presents several challenges relating to operational control and ethical governance. To take advantage of the full potential found in agentic AI, the DoD must develop a clear way forward, invest in oversight mechanisms, and ensure responsible deployment aligns with national security priorities.

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1.0 TI Request

1.1 Inquiry

What is the status of agentic artificial intelligence (AI) systems in the U.S. Department of Defense (DoD)?

1.2 Description

The Cybersecurity and Information Systems Information Analysis Center (CSIAC) was asked how agentic AI is being used in the DoD and, specifically, what are the state and direction of research for agentic AI. In addition, the inquirer wanted to know how agentic AI is being used or could be used in the near future (1–3 years) and in normal business processes, such as program management, project management, human resources, finance, customer service, sales, marketing, legal, etc.

2.0 TI Response

CSIAC personnel performed research to gather information on agentic AI and how it is being used in the DoD, as well as in normal business processes. To address this inquiry, information was also gathered from the broader CSIAC community to augment the initial data found.

What is agentic AI? Shavit et al. [1] state, “Agentic AI systems are characterized by the ability to take actions [that] consistently contribute toward achieving goals over an extended period of time, without their behavior having been specified in advance.” The degree to which an AI system is considered agentic is based on several components: goal complexity, environmental complexity, adaptability, and independent execution. Therefore, the more complex, adaptable, and independent an AI system, the more agentic it is deemed to be.

Examples of agentic AI include [2]:

AI-powered agents that can plan your next trip overseas and make all the travel arrangements, humanlike bots that act as virtual caregivers for the elderly, or AI-powered supply-chain specialists that can optimize inventories on the fly in response to fluctuations in real-time demand.

2.1 Agentic AI in the DoD

The idea of agentic AI is relatively new, as the term started to gain significant traction around December 2024. “Agentic warfare” and “agent warfare” are interchangeable, newer terms used in the DoD and federal government for the consolidation of a multitude of limited-scope AI applications in military operations into a more broadly inclusive holistic warfare concept. Figure 1 provides a chart on recent agentic AI interest.

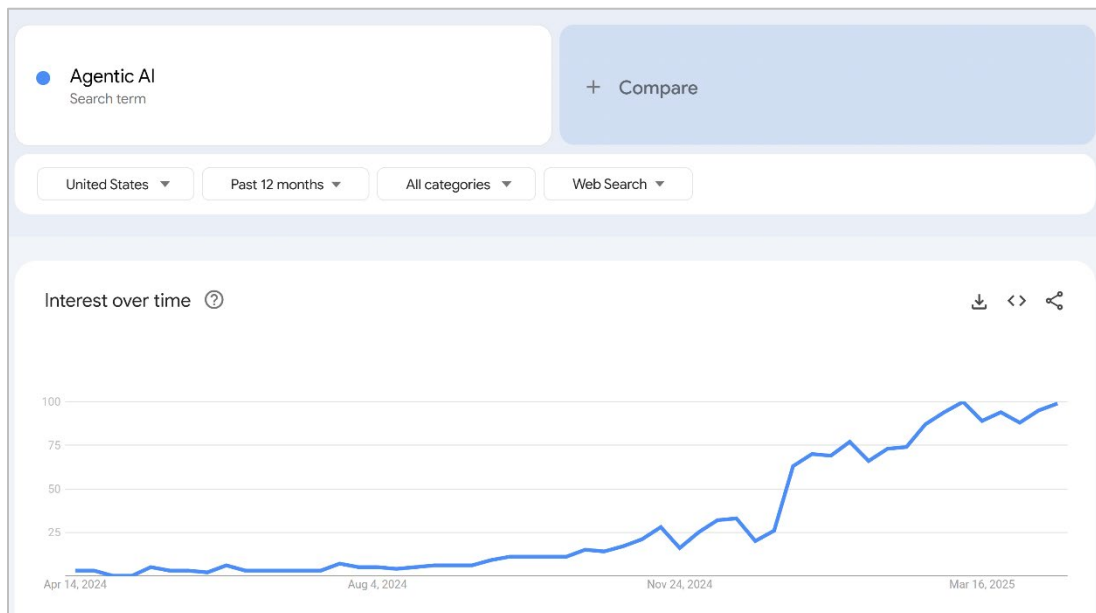


Figure 1. Google Trends Chart: Interest Over Time on Agentic AI Search Term [3].

Although most of these limited-scope AI applications have been in discussion for a while now, with some even put into practice, a key difference in the agentic-warfare concept is the inclusion of autonomous AI agents acting in an independent (from human interaction) supervisory capacity to carry out tasks at a significantly faster pace and larger scale than humans could (and possibly faster than they could monitor).

For agentic AI, this would generally include the ability to act in a proactive manner vs. a reactive/retroactive manner. This is something that has been historically avoided by the United States, especially if it involves lethal-force application. Examples of agentic warfare might include AI agents performing autonomous decision-making (independently analyzing intelligence, suggesting tactical and strategic moves, carrying out battlefield tasks, etc.), initiating and conducting operations (especially in the digital realm) at a speed and scale beyond human capabilities, and executing rapid AI-agent-organized cyberattacks to include friendly and enemy cyberattacks that target the AI-agents themselves.

A Google search of all .mil sites did not find any mention of agentic warfare or agent warfare (in the proper context where biological, chemical, or human agents are removed). However, a Google search of all .gov sites did provide a couple of returns. These concern the most notable recent event relating to agentic AI within the DoD, which involves the Defense Innovation Unit's (DIU's) Thunderforge Project and Scale AI, Inc. (Scale), winning the contract in March of 2025 to help with that initiative.

In the first document [4], Scale recommends that the DoD adopts a mindset shift that looks “to build out and implement an AI strategy that will best position the United States to win.” Scale further notes that “the DoD has not launched and scaled a new AI program in nearly a decade, instead resorting to a pilot and research mindset.” Scale follows this up with the recommendation that [4]:

... if the United States is going to win, we must shift into an implementation-first mindset.

For this to occur, Scale believes that the DoD must first set a north star related to robust AI implementation in no more than five years. This should focus on agentic applications such as agentic warfare and would provide a “top right of the curve” vision and enable a tangible multiyear plan to reach it.

Agentic warfare presents the best opportunity for the United States to build asymmetric advantages, given that it will eventually be able to complement human's ability to process information. For example, AI agents could drastically improve our offensive and defensive cybercapabilities as well as intelligence-gathering process by constantly monitoring for new information and immediately relaying that information to a human overseer. These examples are possible today and would provide immediate impact. Scale is actively working on deploying the first instance of this in the [U.S.] Indo-Pacific Command INDOPACOM through DIU's Thunderforge effort [5], but if the United States wants to beat China, this approach must be implemented through the entirety of the DoD.

In this context, “setting a north star” likely means establishing a clear, overarching goal or vision that serves as a guiding light for the DoD's long-term direction and actions in furtherance of U.S. AI dominance [6].

2.2 DoD Agentic AI Use Cases

This section includes articles that discuss agentic AI efforts happening in the defense sector. As previously mentioned, the most notable recent event relating to agentic AI within the DoD is DIU's Thunderforge Project and Scale winning a 2025 contract to help with that initiative. The idea of agentic AI and agentic warfare seems to be growing in interest, and more DoD organizations may be seen discussing the topic in the coming months.

2.2.1 Thunderforge Project

Three articles that discuss the Thunderforge Project are summarized as follows:

1. "Agentic Warfare and the Thunderforge Project, Led by a CEO born in 1997 in the U.S.," 8 March 2025 [7]:

In a world where technological evolution often outpaces policy and ethics, a new frontier of warfare is emerging—one in which autonomous AI "agents" can analyze vast troves of data, plan complex operations, and even control drones or other robotic systems. This shift toward "agentic warfare" is already altering power balances on the global stage, prompting both excitement over potential advantages and concern over the risks it introduces.

2. "Introducing Thunderforge: AI for American Defense," 5 March 2025 [5]:

The first nation to fully incorporate AI into military decision-making will shape the history of the 21st century. That's why it's critical for the U.S. to lead on AI and integrate it into large-scale military applications under careful human supervision.

To move the U.S. toward this goal, Scale has been awarded a prime contract by the DIU for Thunderforge. This is the DoD's flagship program to leverage AI for U.S. military planning and operations. It's another big step toward bringing our AI technology and expertise to the government.

3. "DIU's Thunderforge Project to Integrate Commercial AI-Powered Decision-Making for Operational and Theater-Level Planning," 5 March 2025 [8]:

DIU has awarded a prototype contract to Scale for Thunderforge, an initiative designed to integrate AI into military operational and theater-level planning and fusing cutting-edge modeling and simulation tools. The system's end state will accelerate decision-making, allowing planners to more rapidly synthesize vast amounts of information, generate multiple courses of action, and conduct AI-powered wargaming to anticipate and respond to evolving threats.

2.2.2 “Leidos and Moveworks Bring Agentic AI Capabilities to Government Agencies”

This April 2025 article explains that [9]:

Agentic AI helps people do their work better and faster as a digital personal assistant that knows how to make decisions and automate daily work processes. As commercial organizations are embracing it, the Leidos-Moveworks partnership will allow government agencies to adopt the technology with assured security and compliance.

2.2.3 “DoD Modernization Exchange 2025: Palo Alto Networks’ Jim Smid on Agentic AI for Cyber Defense”

This March 2025 article discusses how agentic AI can help the DoD [10]:

As if defending the world’s largest military from cyberattacks wasn’t difficult enough, the Defense Department, like other large targets, must contend with another complication: adversaries who leverage AI to plan and conduct attacks—often at astonishing speeds.

2.2.4 “The Integration of AI Agents Will Become Increasingly Critical Across the National Security Space”

This March 2025 article discusses agentic AI’s role in the national security space [11].

We are at an inflection point in the global AI race—the defining technological battleground of this century. The rapid development and deployment of agentic AI is not just an imperative but a necessity for the U.S. to maintain its strategic edge in the Great Power Competition.

2.3 Agentic AI for Business Processes

A good overall review of agentic AI and its role with work functions is described in the article “What Is Agentic AI, and How Will It Change Work” [2]:

While agentic AI systems harness the creative abilities of generative AI models such as ChatGPT, they differ in several ways. First, they are focused on making decisions rather than on creating content. Second, they do not rely on human prompts but rather are set to optimize particular goals or objectives, such as maximizing sales, customer satisfaction scores, or efficiency in supply-chain processes. And third, unlike generative AI, they can also carry out complex sequences of activities, independently searching databases or triggering workflows to complete activities.

Through an open-source search, CSIA was able to identify 27 tools and platforms that can help implement agentic AI into regular business practices. These findings have been compiled into a table organized by category (Table 1), which includes a short description of the tool, along with a reference citation for the respective websites. The business process categories each tool is mapped to are Notable, Program/Project Management, Customer Support and Service Automation, Sales and Marketing Operations, Supply Chain and Inventory Management, Human Resources and Recruiting, Financial Operations, Information Technology (IT) and Predictive Artificial Intelligence for Information Technology Operations (AIOps), and Legal and Compliance Monitoring.

2.4 Cybersecurity Concerns

As use of agentic AI continues to grow, so will cybersecurity concerns. An article titled “The Agentic AI Revolution: 5 Unexpected Security Challenges” [12] highlights five security concerns to be aware of. The security challenges revolve around the lack of visibility and oversight that will become significant with the adoption of agentic AI at scale. To combat this [12]:

Organizations must ensure safe, compliant, and trusted deployments to safely deploy agentic AI at scale. Key requirements include full visibility into activities, strong authentication mechanisms, least-privilege access, just-in-time (JIT) access controls, and comprehensive session audit to trace actions back to their identities.

Table 1. Agentic AI Tools and Platforms for Business Processes

Name	Category	Source Description
Thunderforge	Notable	Serves as the DoD's premier program to leverage AI for U.S. military planning and operations [5].
ClickUp Brain	Program/Project Management	"The world's first neural network connecting tasks, docs, people, and all of your company's knowledge with AI" [13].
Asana Intelligence	Program/Project Management	"Automate manual work, get insights on what to prioritize, and adapt workflows to your organization's evolving needs" [14].
monday.com AI Assistant	Program/Project Management	Adds AI capabilities to prioritize tasks, suggest project plans, automate status reports, and monitor project health [15].
Smartsheet AI	Program/Project Management	"Get instant insight into your business and answer ad hoc questions with AI-generated charts and metrics" [16].
Jira Product Discovery and Atlassian Intelligence	Program/Project Management	"Leverage data and customer insights to help your team prioritize ideas that will make the biggest impact" [17].
Forecast AI	Program/Project Management	"Tired of juggling spreadsheets and scattered tools? Forecast gives you crystal-clear visibility across all projects and resources" [18].
HiveMind	Program/Project Management	"Let HiveMind kick off projects, write content, and reply to emails for you in seconds" [19].
Notion AI	Program/Project Management	"One tool that does it all. Search, generate, analyze, and chat—right inside Notion" [20].
Moveworks	Customer Support and Service Automation	"One agentic AI assistant to empower your entire workforce. Find answers. Automate tasks. Boost productivity. Build AI agents" [21].
Ada	Customer Support and Service Automation	"AI customer service to accelerate your business—the platform that empowers customer-service leaders to deliver efficient, high-quality support at scale with an AI agent—continuously improving the speed and quality of results across all channels and languages, 24/7" [22].
Forethought	Customer Support and Service Automation	"Scale customer support with advanced agentic AI. Enhance resolution rates, cut costs, and ensure a top-tier customer experience with the world's most intelligent multi-agent AI system" [23].
Salesloft	Sales and Marketing Operations	"With our new Chat Agent, your website visitors will have a personalized experience with an intelligent chat agent that can answer their questions or connect them to a member of your sales team" [24].

Name	Category	Source Description
Apollo	Sales and Marketing Operations	"Apollo is an end-to-end AI sales platform with all the features, integrations, and training you need to grow your business" [25].
o9 Solutions	Supply Chain and Inventory Management	"Transform from siloed to AI-powered integrated planning. Elevate your end-to-end decision-making capabilities with the o9 Digital Brain platform" [26].
Coupa	Supply Chain and Inventory Management	"Optimize supply-chain design in an ever-evolving climate" [27].
Hirevue	Human Resources and Recruiting	"Hirevue's AI-powered platform pinpoints and validates the skills that drive job success" [28].
Paradox—Olivia	Human Resources and Recruiting	"Hiring takes time. But our AI assistant Olivia gives you more of it—automating tasks so you spend more time with people, not software" [29].
Eightfold AI	Human Resources and Recruiting	"The future of AI recruiting is here. Discover how Eightfold agentic AI transforms talent acquisition—autonomous, intelligent, and built for the next era of hiring" [30].
Kore AI	Financial Operations	"Automated 24/7 support for your customers and members. Expectations for top-tier support from organizations in the financial services and insurance industry are surging. Are you ready to meet them?" [31].
Zeni AI	Financial Operations	"Let Zeni help you make smart decisions, as you grow quickly. Trust us to assist your business in making sound financial decisions and receive personalized budgeting recommendations, all thanks to our dedicated team of financial advisors and AI bookkeeping" [32].
Vic AI	Financial Operations	"Cut costs, improve accuracy, and scale smarter with AI-first accounting" [33].
BigPanda	IT and Predictive AIOps	"AI-powered [information technology operations] ITOps and incident management. Stay ahead of incidents and automate manual workflows to deliver exceptional customer experiences" [34].
Dynatrace	IT and Predictive AIOps	"Understand your business like never before. Transform complexity into your greatest asset with the leader in AI-powered observability" [35].
Evisort	Legal and Compliance Monitoring	"The unparalleled leader in contract AI. Only Evisort delivers a complete, AI-native platform for end-to-end contract life-cycle management, including the first large language model built specifically for contracts" [36].
Luminance	Legal and Compliance Monitoring	"Luminance brings specialist, Legal-Grade AI to every touchpoint a business has with its contracts, from generation to negotiation and postexecution analysis" [37].

Name	Category	Source Description
Clausematch	Legal and Compliance Monitoring	“Clausematch policy management: fully digital streamlined policy management. Collaborate, create, manage, and review in real time, with a complete audit trail and live insight. With Corlytics, you can confidently find, understand, implement, and evidence regulatory compliance to the highest standards expected by regulators” [38].

There are no known official government guidance or policies yet specifically on agentic AI. However, in an OpenAI research paper titled “Practices for Governing Agentic AI Systems” [1], the authors advocate for explainability requirements, which would ensure that agentic AI systems can provide clear, understandable explanations for their decisions. This could help address concerns about transparency and build trust in AI-driven cybersecurity solutions.

References

1. Shavit, Y., S. Agarwal, M. Brundage, S. Adler, C. O’Keefe, R. Campbell, T. Lee, P. Mishkin, T. Eloundou, A. Hickey, K. Slama, L. Ahmad, P. McMillan, A. Beutel, A. Passos, and D. G. Robinson. “Practices for Governing Agentic AI Systems.” OpenAI, <https://cdn.openai.com/papers/practices-for-governing-agentic-ai-systems.pdf>, accessed April 2025.
2. Purdy, M. “What Is Agentic AI, and How Will It Change Work?” Harvard Business Review, <https://hbr.org/2024/12/what-is-agentic-ai-and-how-will-it-change-work>, 12 December 2024.
3. Google Trends. “Agentic AI.” <https://trends.google.com/trends/explore?geo=US&q=Agentic%20AI&hl=en>, accessed April 2025.
4. Tadross, D. “Scale: Statement Before the Senate Armed Services Committee Subcommittee on Cybersecurity.” U.S. Senate Committee on Armed Services, https://www.armed-services.senate.gov/imo/media/doc/tadross_testimony.pdf, 5 March 2025.
5. The Scale Team. “Introducing Thunderforge: AI for American Defense.” Scale (Blog), <https://scale.com/blog/thunderforge-ai-for-american-defense>, 5 March 2025.
6. U.S. Senate Subcommittee on Cybersecurity. “Stenographic Transcript: Testimony on Harnessing Artificial Intelligence Cyber Capabilities.” U.S. Senate Committee on Armed Services, <https://www.armed-services.senate.gov/imo/media/doc/32525cybersecurity.pdf>, 25 March 2025.
7. Baek, D. S. “Agentic Warfare and the Thunderforge Project, Led by a CEO Born in 1997 in the U.S.” LinkedIn, <https://www.linkedin.com/pulse/agentic-warfare-thunderforge-project-led-ceo-born-1997-baek-e4e8c/>, 8 March 2025.
8. Defense Innovation Unit. “DIU’s Thunderforge Project to Integrate Commercial AI-Powered Decision-Making for Operational and Theater-Level Planning.” <https://www.diu.mil/latest/dius-thunderforge-project-to-integrate-commercial-ai-powered-decision-making>, 5 March 2025.
9. Leidos, Inc. “Leidos and Moveworks Bring Agentic AI Capabilities to Government Agencies.” Leidos, <https://www.leidos.com/insights/leidos-and-moveworks-bring-agentic-ai-capabilities-government-agencies>, 9 April 2025.

10. Seru, J. "DoD Modernization Exchange 2025: Palo Alto Networks' Jim Smid on Agentic AI for Cyber Defense." Federal News Network, <https://federalnewsnetwork.com/federal-insights/2025/03/dod-modernization-exchange-2025-palo-alto-networks-jim-smid-on-agentic-ai-for-cyber-defense/>, 27 March 2025.
11. Pessin, B. "The Integration of AI Agents Will Become Increasingly Critical Across the National Security Space." Nextgov/FCW, <https://www.nextgov.com/ideas/2025/03/agentic-ai-adoption-top-priority-defense-and-intelligence-leaders-heres-why/403624/>, 13 March 2025.
12. Moss, Y. "The Agentic AI Revolution: 5 Unexpected Security Challenges." CyberArk (Blog), <https://www.cyberark.com/resources/blog/the-agentic-ai-revolution-5-unexpected-security-challenges>, 28 February 2025.
13. ClickUp. "ClickUp Brain." <https://clickup.com/brain>, accessed April 2025.
14. Asana, Inc. "AI Is No Longer Just a Tool—It's a Teammate." Asana, <https://asana.com/product/ai>, accessed April 2025.
15. Monday.com, Ltd. "AI That Works for You." Monday.com, <https://monday.com/w/ai>, accessed April 2025.
16. Smartsheet Inc. "Smartsheet AI Tools Empower Teams to Do More." Smartsheet, https://www.smartsheet.com/ai?srsItd=AfmBOoqtblqcKbpcJZxSLdR03SZQd6fOA_db_8jB9EscgysHThZ-zRkn, accessed April 2025.
17. Atlassian. "From Ideas to Impact, Build What Matters." Jira Product Discovery, <https://www.atlassian.com/software/jira/product-discovery>, accessed April 2025.
18. Forecast. "Ditch Chaos. Drive Growth." <https://www.forecast.app/>, accessed April 2025.
19. Hive. "HiveMind: The Magic of AI for Your Team." <https://hive.com/hivemind/>, accessed April 2025.
20. Notion Labs, Inc. "The AI Workspace That Works for You." Notion, <https://www.notion.com/product/ai>, accessed April 2025.
21. Moveworks, Inc. "One Agentic AI Assistant to Empower Your Entire Workforce." Moveworks, <https://www.moveworks.com/>, accessed April 2025.

22. Ada. “AI Customer Service to Accelerate Your Business.” <https://www.ada.cx/>, accessed April 2025.
23. Forethought. “AI Agents for Enterprise Customer Experience.” <https://forethought.ai/>, accessed April 2025.
24. Salesloft, Inc. “AI Agents at Your Service: Chat Agent.” Salesloft, <https://www.salesloft.com/resources/videos/ai-agents-at-your-service-chat-agent>, 22 April 2025.
25. Apollo. “Meet Your AI Outbound Engine.” <https://www.apollo.io/>, accessed April 2025.
26. o9 Solutions, Inc. “The o9 Digital Brain™ Platform.” o9, <https://o9solutions.com/>, accessed April 2025.
27. Coupa. “Optimize Supply Chain Design in an Ever-Evolving Climate.” <https://www.coupa.com/products/supply-chain-design/>, accessed April 2025.
28. Hirevue, Inc. “The Right Data to Make the Right Hire.” Hirevue, <https://www.hirevue.com/>, accessed April 2025.
29. Paradox, Inc. “Meet the AI Assistant for All Things Hiring.” Paradox O, <https://www.paradox.ai/>, accessed April 2025.
30. Eightfold AI. “From Talent Intelligence to Talent Advantage.” <https://eightfold.ai/>, accessed April 2025.
31. Kore.ai, Inc. “Re-Imagine Work With AI.” Kore.ai, <https://kore.ai/>, accessed April 2025.
32. Zeni, Inc. “Unleash the Power of AI Bookkeeping.” Zeni, <https://www.zeni.ai/>, accessed April 2025.
33. Vic.ai. “AP Automation, Reimagined.” <https://www.vic.ai/>, accessed April 2025.
34. BigPanda. “Agentic IT Operations.” <https://www.bigpanda.io/>, accessed April 2025.
35. Dynatrace LLC. “Understand Your Business Like Never Before.” Dynatrace, <https://www.dynatrace.com/>, accessed April 2025.
36. Evisort. “The Unparalleled Leader in Contract AI.” <https://www.evisort.com/>, accessed April 2025.

37. Luminance Technologies Ltd. “Legal-Grade™ AI: Whenever Computer Meets Contract.” Luminance, <https://www.luminance.com/>, accessed April 2025.

38. Corelytics, Ltd. “Clausematch Policy Management: Fully Digital Streamlined Policy Management.” Corlytics, <https://www.corlytics.com/solutions/clausematch-policy-management/>, accessed April 2025.

Biography

Joseph M. Friar is a Cybersecurity & Information Systems Information Analysis Center (CSIAC) research inquiry analyst at The SURVICE Engineering Company (SURVICE), where he performs in-depth research relating to technology fields such as cybersecurity and information systems. He also works with government clients to provide information-oriented solutions and answer technical inquiries. Mr. Friar holds a B.S. in computer information systems, specializing in software design, from Stevenson University.

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Bibliography

- Finn, T., and A. Downie. "Agentic AI vs. Generative AI." IBM, <https://www.ibm.com/think/topics/agentic-ai-vs-generative-ai>, 2024.
- HGS CX Technologies Inc. "Understanding Agentic AI: A Deep Dive Into AI With Agency." HGS/CX, <https://hgs.cx/blog/understanding-agentic-ai-a-deep-dive-into-ai-with-agency/>, 6 January 2025.
- International Business Machines Corporation Artificial Intelligence Ethics Board. "AI Agents: Opportunities, Risks, and Mitigations." IBM, <https://www.ibm.com/granite/docs/resources/ai-agents-opportunities-risks-and-mitigations.pdf>, March 2025.
- International Business Machines Corporation Artificial Intelligence Ethics Board. "Getting Your Organization Ready to Scale Responsible Agentic AI." IBM, <https://www.ibm.com/think/insights/scale-responsible-agentic-ai>, 11 April 2025.
- Kumayama, K. D., P. Chiruvolu, and D. Weiss. "AI Agents: Greater Capabilities and Enhanced Risks." Reuters, <https://www.reuters.com/legal/legalindustry/ai-agents-greater-capabilities-enhanced-risks-2025-04-22/>, 22 April 2025.
- Larson, J., and A. Smith. "The Age of Agentic AI." Booz Allen, <https://www.boozallen.com/insights/velocity/the-age-of-agentic-ai.html>, 2025.
- Loucks, J., G. Crossan, B. Sarer, C. Widener, and A. Bucaille. "Autonomous Generative AI Agents: Under Development." Tech, Media, & Telecom, <https://www2.deloitte.com/us/en/insights/industry/technology/technology-media-and-telecom-predictions/2025/autonomous-generative-ai-agents-still-under-development.html>, 19 November 2024.
- Pounds, E. "What Is Agentic AI?" NVIDIA, <https://blogs.nvidia.com/blog/what-is-agentic-ai/>, 22 October 2024.
- Scale AI, Inc. "The Era of Agentic Warfare Is Here." Scale, <https://scale.com/agentic-warfare>, accessed April 2025.
- Vijayan, A. "Agentic AI—Exploring Its Enterprise Potential." Everest Group (Blog), <https://www.everestgrp.com/automation/agentic-ai-exploring-its-enterprise-potential-blog.html>, 9 May 2024.