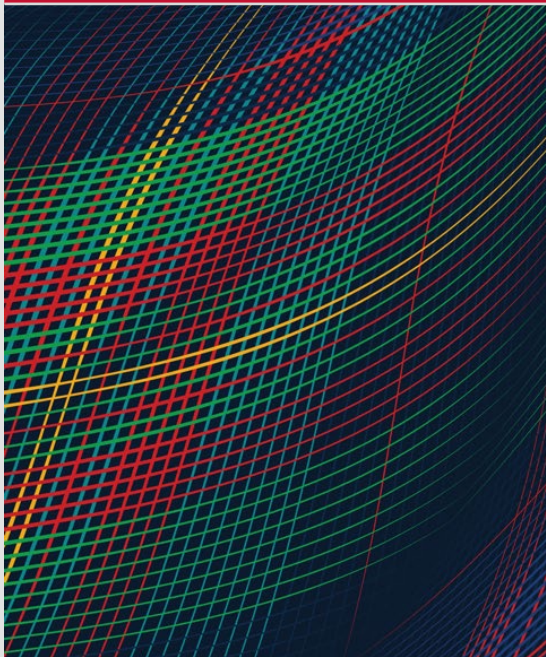
Accelerating Insertion of Warfighting Capability using GenAI based Identification of Military Vehicles

Carnegie Mellon University
Software Engineering Institute



OCTOBER 28–31, 2024

Bjorn Andersson and Dionisio de Niz

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DM24-1279

DoD Systems Interact with Their Physical Environment

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DoD Systems Include Software

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DoD Systems Include Software that Interacts with the Physical Environment

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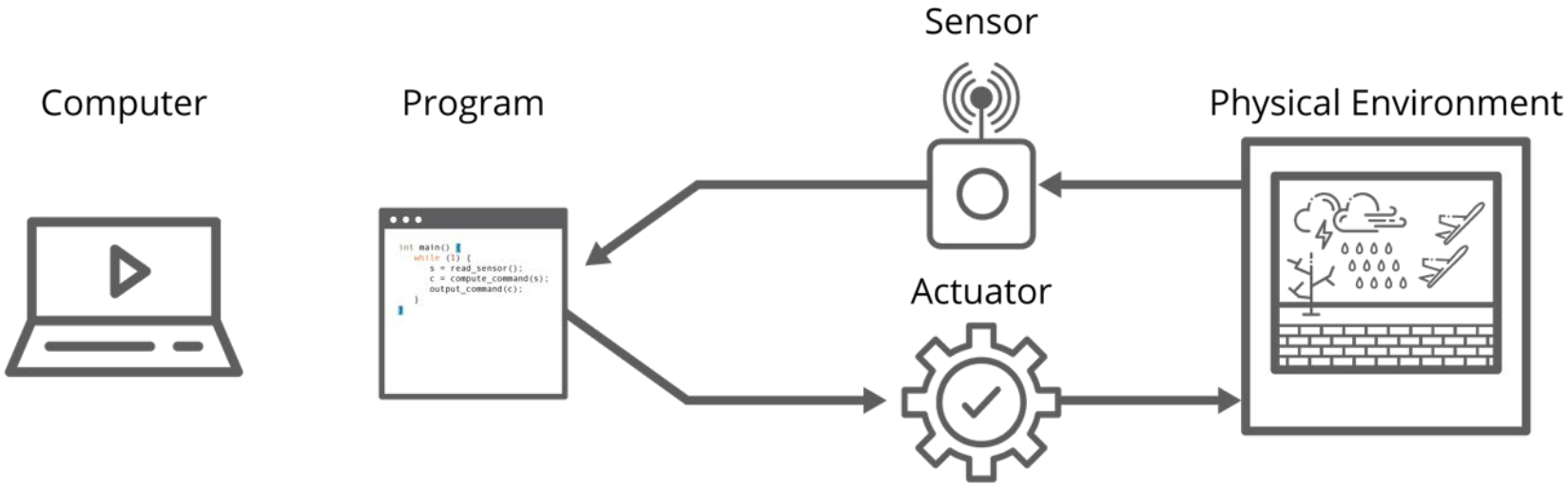
Commonality of DoD Systems



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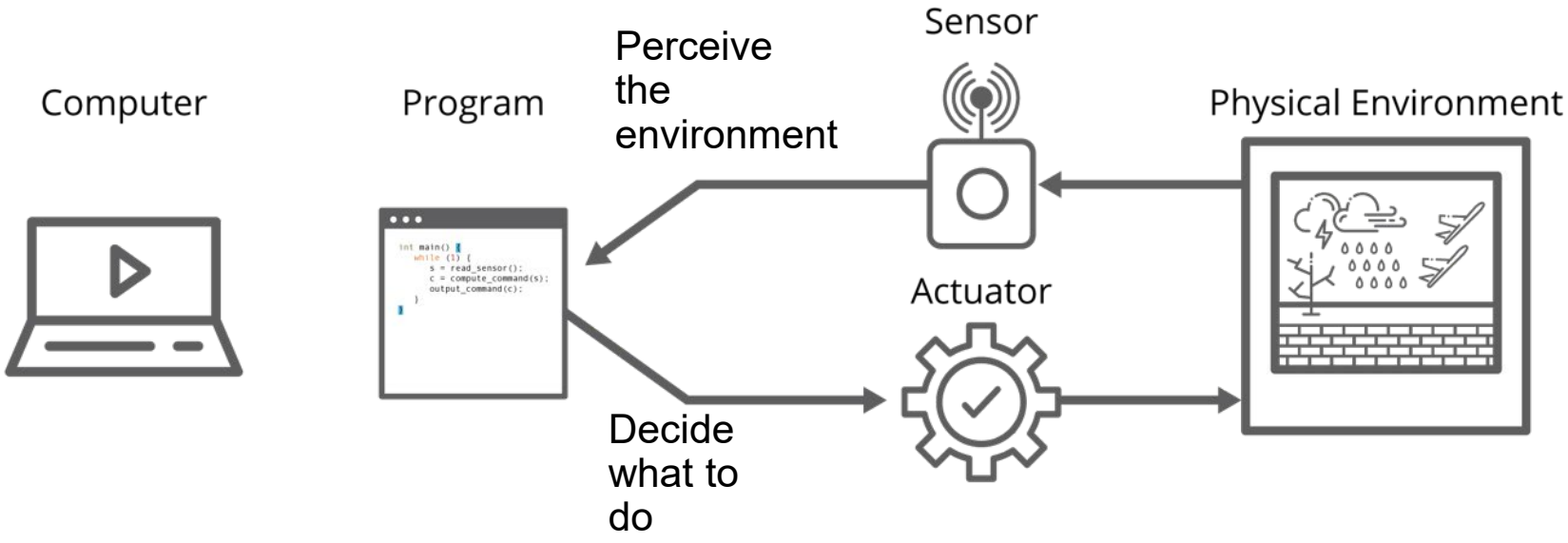

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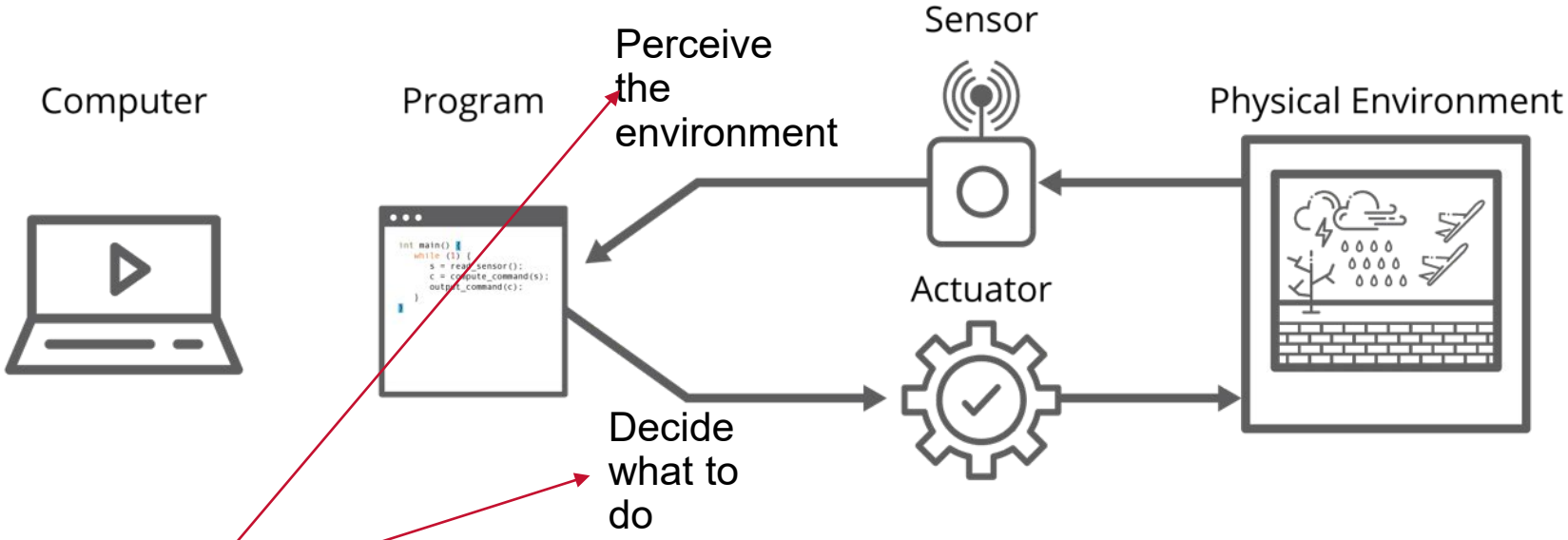

Use GenAI to do this better
GenAI brings intelligence and it can be incorporated faster

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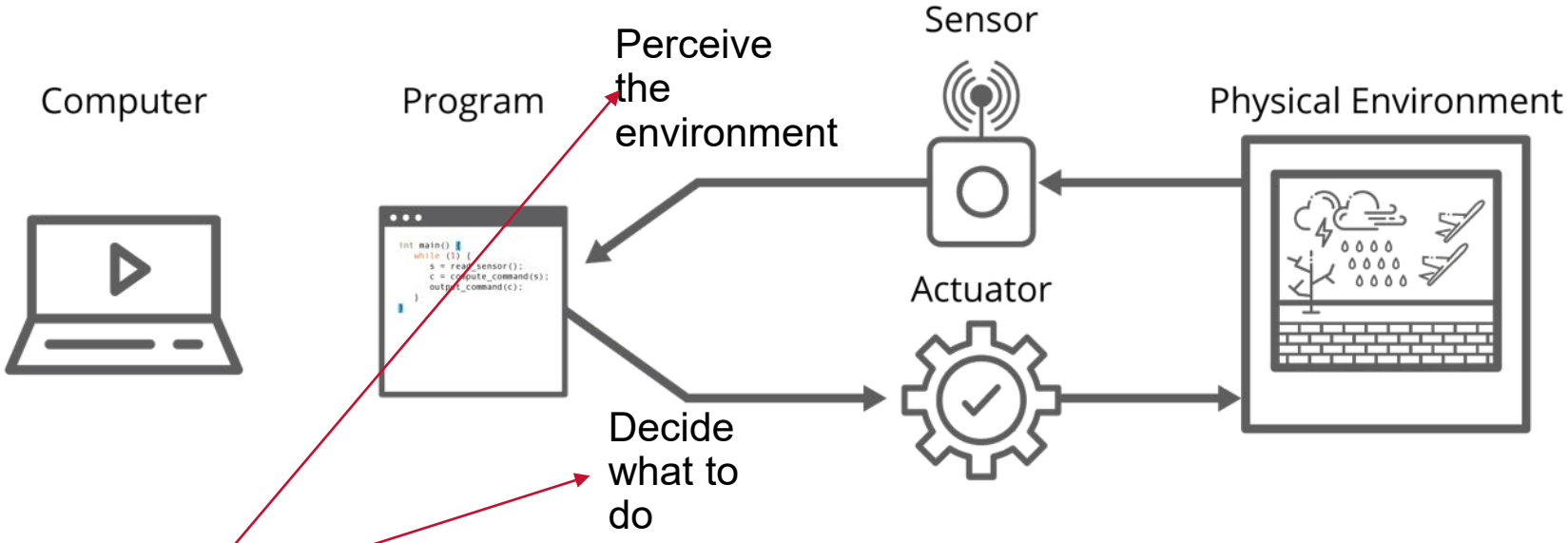

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GenAI can be instructed using natural language (e.g., English)

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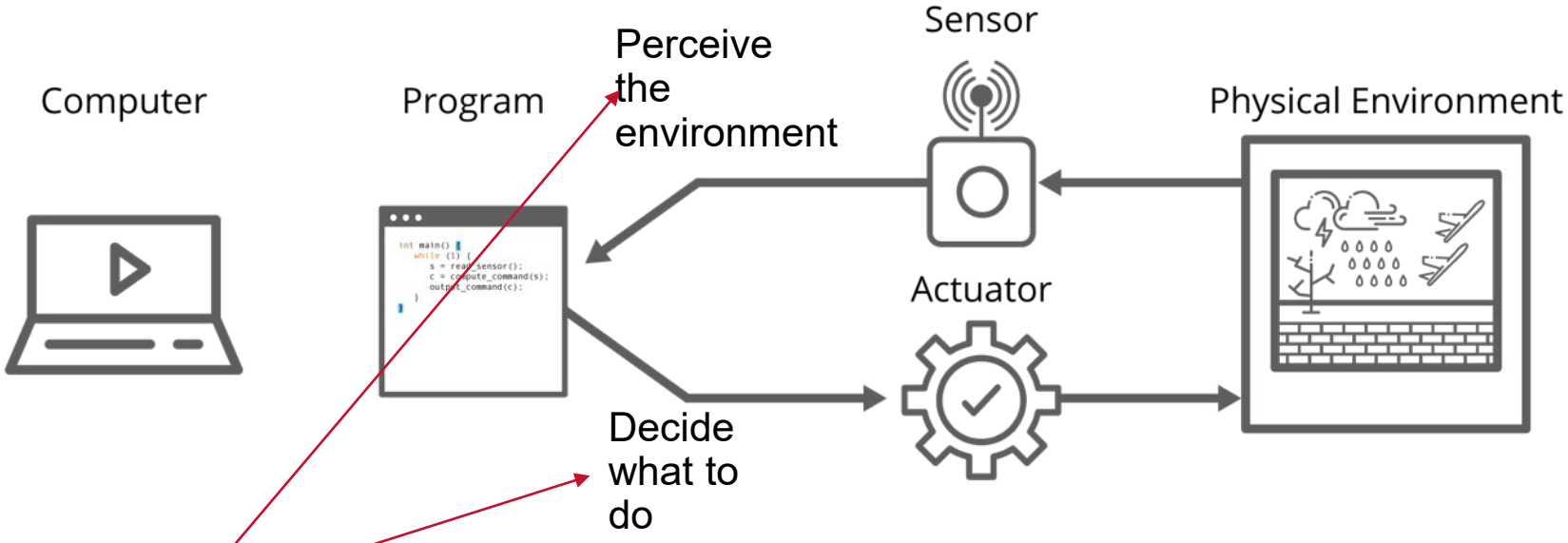

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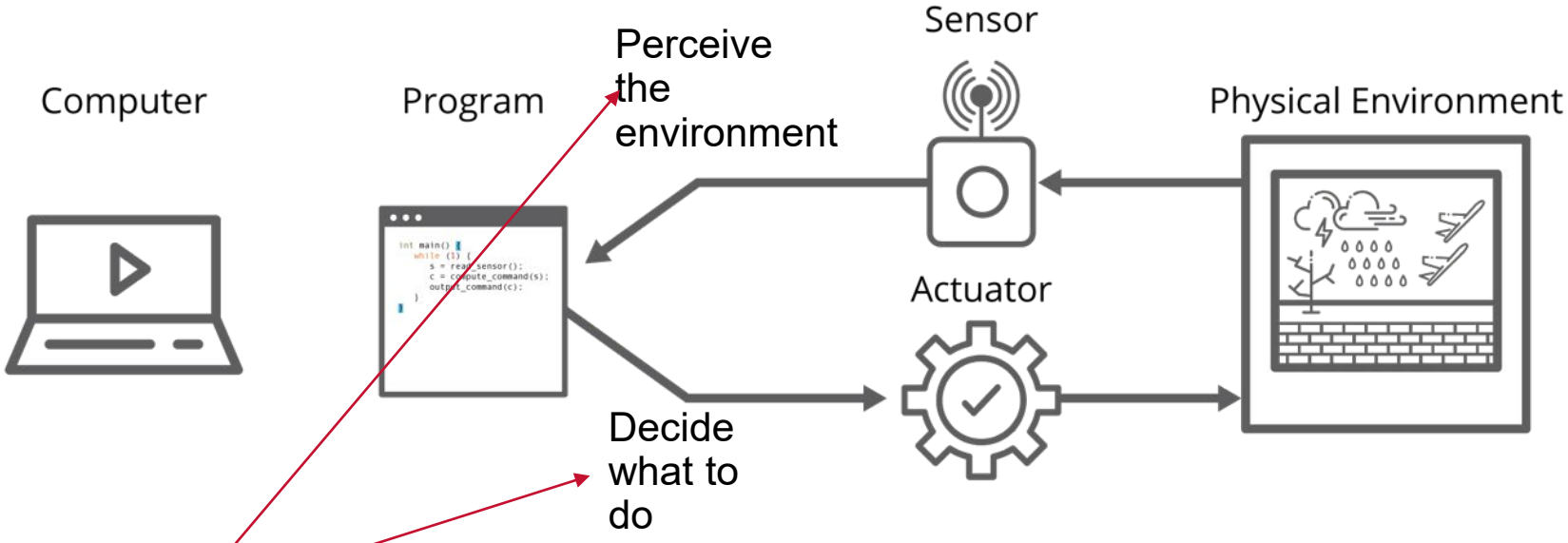

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This paper answers these

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Accelerating Insertion of Warfighting Capability using GenAI based Identification of Military Vehicles

What is this?
Is it friend or foe?
If it is foe, how to destroy it?
Tactical advice?

Use GenAI to answer these questions

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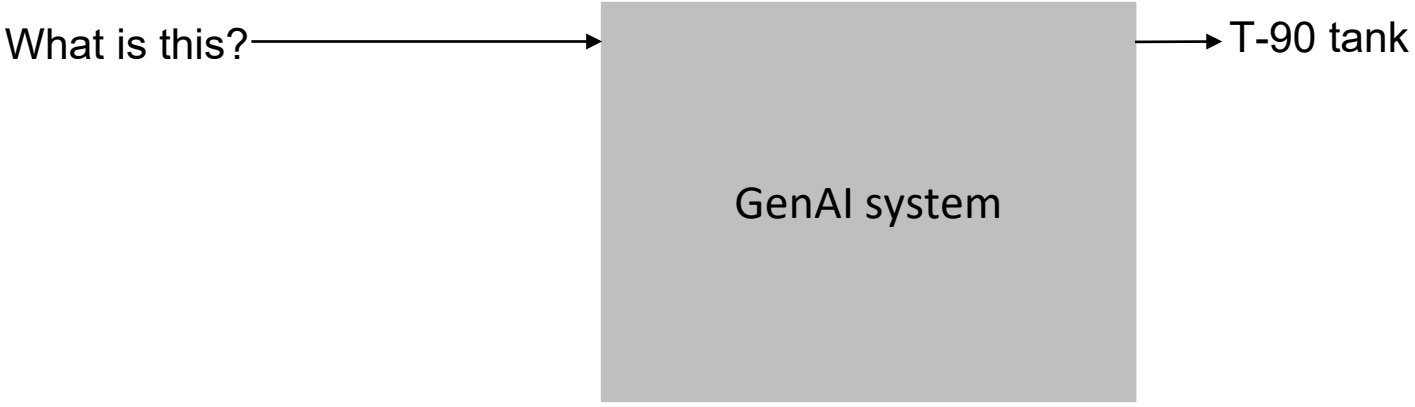

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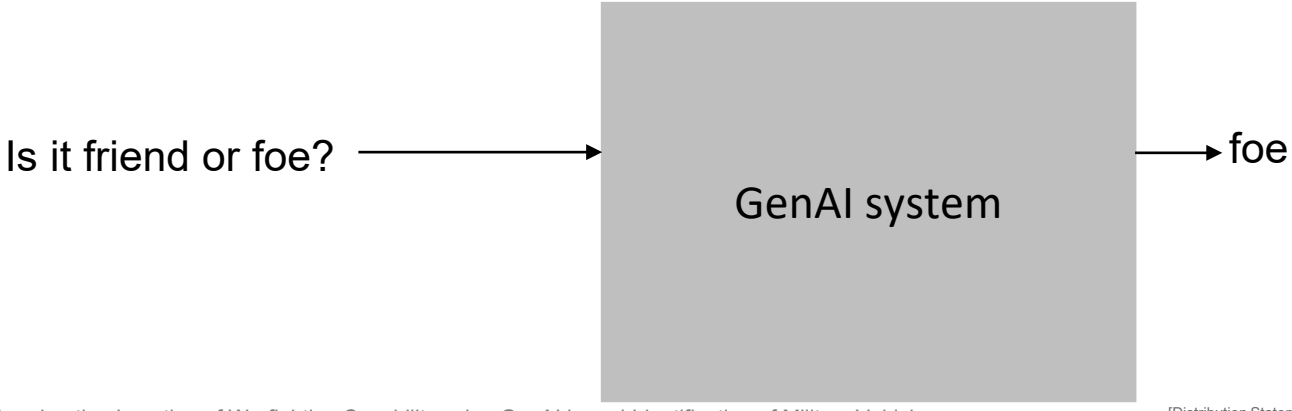

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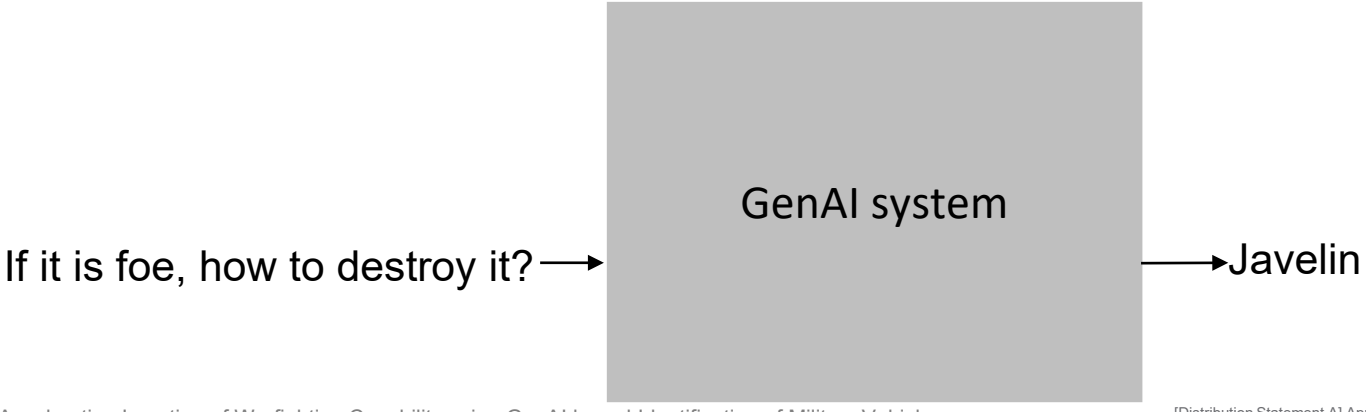

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Tactical advice? → → Aim at turrent; stay at 2.5km from it; attack when dark; relocate after fire

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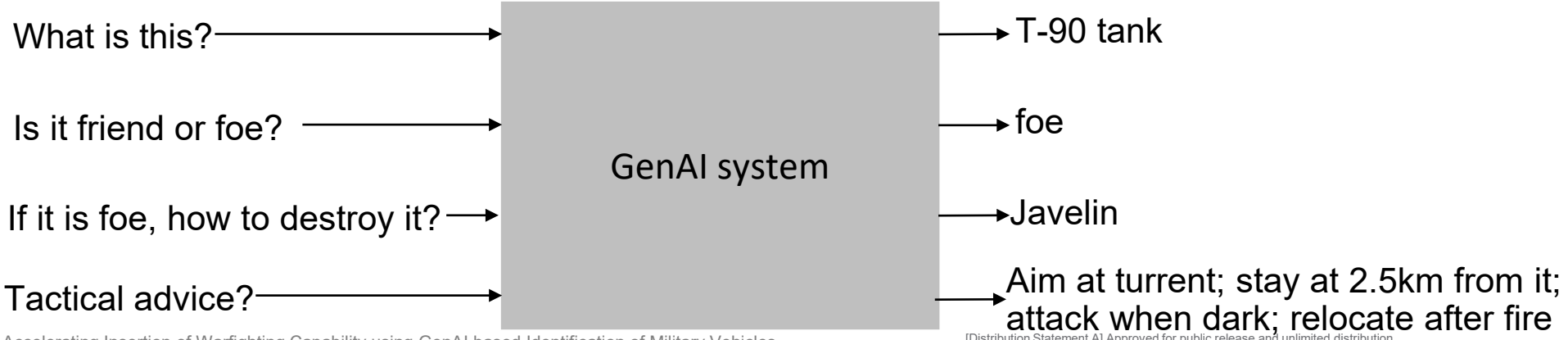

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We have tested it on ground vehicles. Works fine—see paper.

We have tested it on air vehicles. Works fine—see paper.

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Thanks!

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