Department of the Navy SBIR/STTR Transition Program

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Topic # N202-126
Scenario Development and Enhancement for Military Exercises
Soar Technology, Inc.

WHO

SYSCOM: ONR

Sponsoring Program: ONR Code 34

Transition Target: Information Dominance

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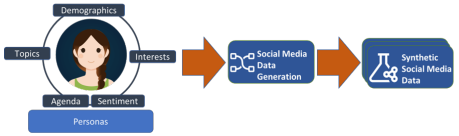
Other Transition Opportunities:



DHW

Notes: GRIOT (Generate Realistic Information-Operations-relevant Text)
This technology has been successfully used by external stakeholders at the University of Maryland Applied Research Laboratory for Intelligence and Security (ARLIS) to develop synthetic social media data for the DARPA INCAS (Influence Campaign Awareness and Sensemaking) program.

WHAT

Operational Need and Improvement: Information Environment operators require a sophisticated simulation system to effectively navigate both proactive and defensive strategies within the digital and social media landscapes. In the absence of such a system, key personnel including decision-makers, analysts, and communicators are left ill-prepared to combat information warfare challenges on these platforms. Many of the existing systems fall short, underperforming in exercises and lacking in realistic training simulations. Through the OMEN project, GRIOT aims to address this gap by offering an advanced simulation of information warfare. It will include features such as scenario generation assistance, natural language generation, and the flexibility to integrate with various exercise formats. Furthermore, GRIOT, as a component of Project OMEN, provides a controlled environment or "sandbox" to train individuals. This ensures that they can develop strategies to counteract disinformation, enhance communication outreach, and operate within established policy and doctrine guidelines, all while minimizing associated risks.

Specifications Required: Offer an advanced simulation of information warfare by developing a persona-based threat modeling framework that quickly fabricates realistic information environments that exhibit realistic threat behavior, including threat goals, beliefs, and engagement dynamics.

Technology Developed: GRIOT (Generate Realistic Information-Operations-relevant Text) addresses the pressing need to contest the growing misuse of social media environments which have been weaponized to further misinformation agendas. With the increasing national security threats posed by these misleading narratives, the U.S. military has actively pursued Information Operations (IO) initiatives to counteract such risks Despite these strides, a glaring gap persists: the absence of robust training tools that offer IO professionals a simulated platform to execute operations in information environments (OIE). Bridging this void, GRIOT offers a state-of-the-art simulated social media realm. By harnessing the power of large language models (LLMs) and cutting-edge artificial intelligence (AI), GRIOT presents an unparalleled emulation of various social media platforms, complete with lifelike, persona-driven bots. GRIOT offers the ability to immerse trainees in highly realistic synthetic OIEs. As the digital landscape evolves, IO professionals need environments where they can practice, experiment, and refine their strategies. GRIOT provides exactly that. Instructors can harness this platform to craft and control distinct personas, utilizing them to emphasize specific pedagogical objectives. This dynamic interaction allows trainees to engage with these personas, which respond contextually to their messages, hence affording them invaluable experience with OIE under controlled, yet realistic, conditions.

Warfighter Value: Synthetic social media provides opportunities for improving information operation (IO) mission rehearsal, TTP development, and training use-case. Provides information warfare students with interactive, train-as-you-fight engagement opportunities with real-time responsive social media threat models. Offers social media generation capabilities for the creation of specialized synthetic social media experiences, including foreign language.

WHEN

Contract Number: N68335-22-C-0211 **Ending on:** Mar 31, 2024

Milestone	Risk Level	Measure of Success	Ending TRL	Date
Test Event 2	Low	Operator Interaction	6	TBD

HOW

Projected Business Model: Software. Integrating with USSOCOM efforts for supporting synthetic media environments for unconventional warfare exercises such as Grey Knight and Robin Sage. Integrating with University of Maryland Discovery platform for social media simulation research and evaluation.

Company Objectives: SoarTech is a leading provider of advanced artificial intelligence solutions to address complex Department of Defense mission requirements. SoarTech's AI solutions act as a force multiplier to enable quicker, better decisions and simplify human-machine interaction. By leveraging machine learning technologies built on computational cognitive designs, SoarTech creates autonomous agents to analyze large amounts of data and assist in human decision-making.

Potential Commercial Applications: Business and political organizations that are heavy users of social media messaging to drive action by potential customers/constituents.

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