

GrammaTech, Inc.



Ithaca, NY 14850

<https://www.grammatech.com>

(607) 273-7340

SINCE ITS FOUNDING IN

1988

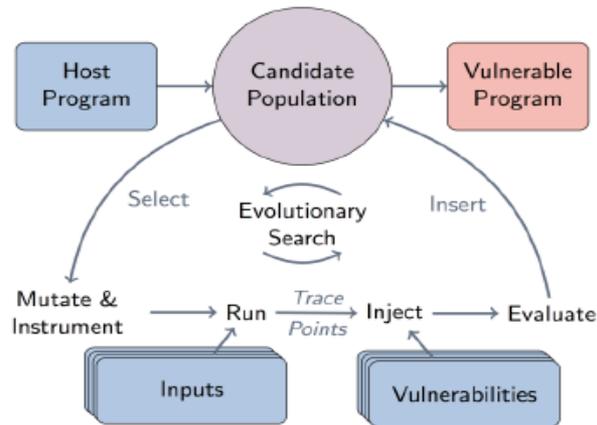
80 SBIR 45 STTR Awards

107 Employees

Small Business Concern

Socioeconomic Category

0 Patent from SBIR/STTR



Solicitation:

Tunable Cyber Defensive Security Mechanisms

DARPA SBIR Sponsor

SB153-003 Topic Number

Improved Performance Primary Innovation

Greater Reliability Secondary Innovation

Injecting Vulnerabilities for Configurable Cyber-defense

Cyber defense techniques continue to evolve. There is a need for better security tactics to defend against vulnerabilities exploited by cyber attacks.

GrammaTech developed the Bug-Injector software, which takes a host program and a library of bug templates as input, and produces a version of the host program with injected instances of the bug templates, each paired with accompanying proofs of vulnerability (PoV). Bug-injector is intended to help software developers evaluate defensive cyber security tools to ensure the quality of their development process.

IMPACT TO MISSION

Bug-injector provides a highly configurable and open concept design that automates the process of generating corpora useful for the evaluations of both static and dynamic cyber defensive tools.

BEYOND PHASE II

Bug-Injector is currently being utilized by the National Institute of Standards and Technology (NIST) and the National Security Agency (NSA). GrammaTech has secured Phase III funds through a subcontract with Cyber Pack Ventures under an NSA Prime Contract valued at \$239,394.38. The Bug-Injector tool chain packaged in a Docker image is available to license and was used and will continue to be used to support other GrammaTech research efforts funded by DHS and ONR. Bug-Injector was also featured in an academic publication which received a distinguished paper award.