ThreatCanaryAI

Artificial Intelligence/Machine Learning Threat Detection Solution

QinetiQ helps our clients achieve their key objectives with individualized consulting, technical, and programmatic support services. We specialize in building experienced teams who deliver long-term results for our clients in the Civilian, Homeland Security, National Security, and Defense spaces, including through Artificial Intelligence (AI) and Machine Learning (ML).

Machine Learning is branch of artificial intelligence and computer science that focuses on the using data and algorithms to enable AI to imitate the way that humans learn.

ThreatCanaryAI is an AI/ML solution developed by QinetiQ's Data and Technology Group to detect explicit threats and inappropriate communications against the Judiciary, U.S. Attorneys, and high-profile Federal employees.

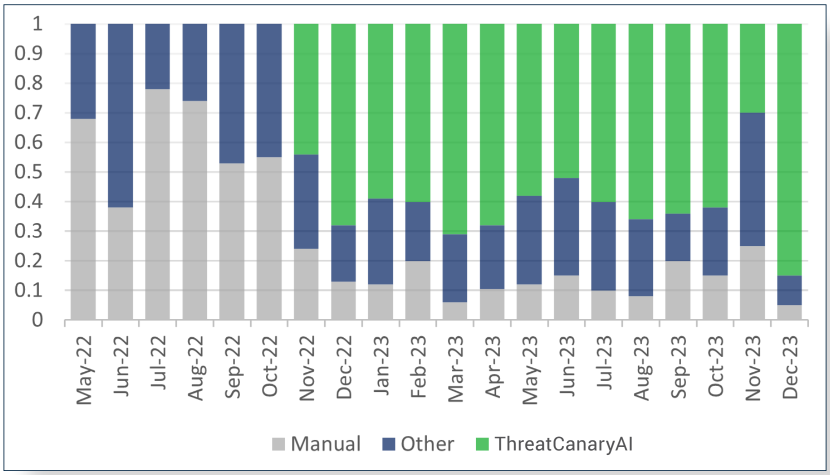
QinetiQ deployed ThreatCanaryAI for use by our partners at the U.S. Marshals Service (USMS) under the Department of Justice in October 2022. ThreatCanary AI supports the work of the Judicial Security Division's Open-Source Intelligence (JSD-OSINT) unit in their large protective mission, which provides security for the country's 94 Judicial districts, including 2,200 sitting judges and 26,000 Federal prosecutors and court officials.

ThreatCanaryAI augments the capabilities of OSINT analysts by automating web-scraping, text processing, and threat prediction tasks, presenting collated results to the user in a convenient web interface for review. With coverage of over a dozen social media platforms, ThreatCanaryAI yielded a dramatic expansion to the JSD-OSINT unit's capability, upgrading the unit's manual screening workflow to processing hundreds of thousands of internet comments each week. ThreatCanaryAI accounts for 59% of all open-source threats against protected personnel referred to USMS district investigators and has created a unit-productivity improvement of over 200%.

Threat Canary AI threat prediction algorithm leverages a language model that has been trained on over 1 million labeled records, as well as threat keyword identification of around 30K words and phrases. Using modern Natural Language Processing (NLP) techniques, ThreatCanaryAI simulates human reasoning to accurately identify violent threats amidst an ocean of innocuous internet content. In direct comparison with third-party OSINT tools, ThreatCanaryAI's predictions were 42% more accurate than its closest competitor. Other notable features include doxing detection, Google dork automation, and video transcription.

After launching in November 2022, ThreatCanaryAI immediately made an impact on unit productivity, precipitating a fundamental change in how the unit performs its work.

Refferals Over Time By Source %



In direct comparison with third-party OSINT tools, ThreatCanaryAI's predictions were 42% more accurate than its closest competitor.

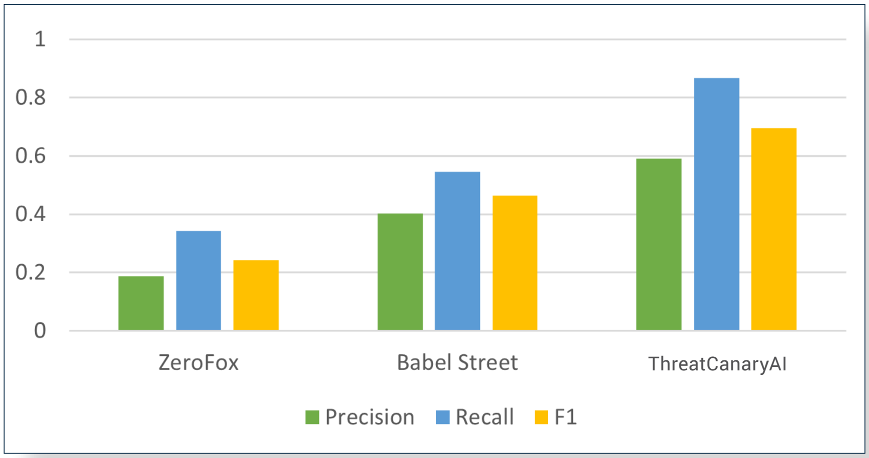
ThreatCanaryAI vs ZeroFox

	Percision	Recall	F1
ThreatCanaryAI	0.671	0.797	0.729
ZeroFox	0.188	0.344	0.243

ThreatCanaryAI vs Babel Street

	Percision	Recall	F1
ThreatCanaryAI	0.513	0.937	0.663
ZeroFox	0.403	0.547	0.464

ThreatCanaryAI vs Third Party Competition: Threat Detection



Collaborating with QinetiQ

QinetiQ welcomes the opportunity to discuss how our experiences and customized solutions can help partners in the homeland security space meet mission goals.

www.QinetiQ.com/en-US

For further information please contact:

Andrés Meneses
Data & Technology Group Lead,
QinetiQ US
(202) 714-9870
andres.meneses@us.qinetiq.com