



Israel's Weaponisation of Technology

April 2024



London | Washington

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Overview of Israel's Weapons Technology



01

Overview of Israel's Weapons Technology

For decades, the Israeli army has tested new weapons technologies including rubber bullets, artificial intelligence-powered robotic guns, and various crowd dispersal technologies, on Palestinian civilians, and has inflicted severe injuries.¹

The Heron TP “Eitan” drone is Israel’s largest unmanned aerial vehicle (UAV) and was brought into service in 2007.² Manufactured by the state-owned Israel Aerospace Industries — Israel’s largest aerospace and defence company and the country’s largest industrial exporter — it can fly up to 40 hours continuously and can carry four Spike missiles.³ The Eitan was first used during Operation Cast Lead in the 2008-09 Gaza war for attacks against civilians, killing 116 children.⁴

In 2019, the Israeli army created a new centre aimed at using AI to accelerate target generation. “The Targets Administrative Division is a unit that includes hundreds of officers and soldiers, and is based on AI capabilities,” according to former Israeli Defence Force (IDF) Chief of Staff, Aviv Kochavi.⁴⁴

Ashraf al-Qudra, spokesperson for the Ministry of Health in Gaza, remarked that medical teams in Gaza had “observed severe burns on the bodies of Palestinians who were killed and wounded by Israel’s bombs [...] something they have not seen in previous conflicts”.⁵ Israel’s reported use of the new Spark drone in the current onslaught suggests that Israel is once again testing new weapons technology on Gaza’s civilians.⁶

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Overview of the Weaponisation of AI



02

Overview of the Weaponisation of AI

Artificial Intelligence (AI) technologies are being deployed globally without sufficient safeguards, regulatory frameworks, or measures to ensure the protection of human rights.⁴⁸

The lack of oversight and due diligence across sectors, including the integration of AI into communications, surveillance, and military applications, is rapidly giving rise to new threats and dangers, especially for civilians and oppressed groups.⁴⁹ AI technologies have the potential to supercharge the violation of human rights at scale.⁵⁰

Israel has been rapidly integrating AI technologies into its weaponry, cybersecurity, and surveillance systems.⁵¹ Palestinians throughout historic Palestine face risks and dangers from AI-enhanced systems which undermine their basic human rights, including AI-based facial recognition technologies, automated weapons, social media monitoring, and military targeting.⁵²

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Israel's Weaponisation of AI in Gaza



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Israel's Weaponisation of AI in Gaza

A source told publication +972 that the Gospel had allowed the IDF to run a “mass assassination factory” where the “emphasis is on quantity and not on quality”.

The Gospel System

In its strikes in Gaza, Israel's military has relied on an AI-enabled system called the Gospel (Habsora) to help determine targets, which have included schools, aid organisation offices, places of worship and medical facilities.⁷

The Gospel system, an AI targeting system which the IDF has given few details on, uses machine learning to quickly parse vast amounts of data to generate potential attack targets.⁸ According to the IDF, the Gospel system “allows the use of automatic tools to produce targets at a fast pace”.⁹ In that same statement, it was outlined that Israel had hit more than 12,000 targets in the first 27 days of combat.¹⁰

The system is relatively new, only being made public in 2020.¹¹ One of its first usages was during Israel's attack on Gaza in 2021.¹²

According to The Jewish Institute for National Security of America report on the use of the Gospel system in Gaza in 2021, while the AI had plenty of training data for what constituted a target, it lacked data on things that human analysts had decided were not targets.¹³ The Israeli military had not collected the target data that its human analysts had discarded as not a target, and as a result the system's training had been biased.¹⁴

The Gospel is used by Israel's cyber and signals intelligence agency to analyse “communications, visuals and information from the internet from mobile networks to understand where people are”, according to a former officer.¹⁵

According to a lecturer at the Hebrew University in Jerusalem, a group of 20 IDF officers might produce 50-100 targets in 300 days.¹⁶ By comparison, the Gospel and its associated AI systems can suggest around 200 targets “within 10-12 days” — a rate that's at least 50 times faster.¹⁷

Israel's Weaponisation of AI in Gaza continued...

In this way, the Gospel system was created to address a chronic problem for the IDF: in earlier operations in Gaza, the air force repeatedly ran out of legitimate targets to strike.¹⁸ The increasing use of AI-based systems like Gospel allows the army to carry out strikes on residential homes where a single Hamas member may live on a massive scale.⁴³ A senior military official told the *Jerusalem Post* that, thanks to the army's AI systems, for the first time the military can generate new targets at a faster rate than it attacks.⁴⁵

According to intelligence sources, The Gospel generates automatic recommendations for attacking private residences where people suspected of being Hamas or Islamic Jihad operatives live.⁴⁶ Israel then carries out large-scale assassination operations through the bombardment of these (often multigenerational and multifamily) residential homes.⁴⁷

Other AI Weapons Technologies

The Gospel is just one of several AI programmes being used by Israeli intelligence, according to Tal Mimran, a lecturer at Hebrew University in Jerusalem who has worked for the Israeli government on targeting during previous military operations.¹⁹ Other AI systems aggregate vast quantities of intelligence data and classify it.²⁰

Israel also uses AI-precision assault rifle sights, such as SMASH from Smart Shooter — which use advanced image-processing algorithms to focus in on targets. Its use has been recorded in both Gaza and the occupied West Bank.²¹

To map Hamas' tunnels underground, the Israel army has also used AI drones to detect humans and operate underground, and report back to soldiers above ground.²²

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Activists' Responses to Israel's Weaponisation of AI in Gaza



Activists' Responses to Israel's Weaponisation of AI in Gaza

Activists are demanding more transparency — pointing to the potential errors AI systems can make and arguing that the fast-paced AI targeting system is what has allowed Israel to barrage large parts of Gaza.²³ Many argue Israel is distorting the technology's purpose — using it to expand target lists rather than protect civilians.²⁴

Palestinian digital rights group 7amleh argued in a recent position paper that the use of automated weapons in war “poses the most nefarious threat to Palestinians”.²⁵

Israel's oldest and largest human rights organisation, the Association for Civil Rights in Israel, submitted a Freedom of Information request to the Israeli Defence Forces' legal division in December 2023 demanding more transparency on automated targeting.²⁶

A report by the Israeli publication *+972 Magazine*, and the Hebrew-language news organisation *Local Call*, found that the Gospel system is being used to manufacture targets so that Israeli military forces can continue to bombard Gaza at an enormous rate, punishing the general Palestinian population.²⁷

According to a source who previously worked in the target division and spoke to *+972/Local Call*: “We prepare the targets automatically and work according to a checklist”.²⁸ “It really is like a factory. We work quickly and there is no time to delve deep into the target. The view is that we are judged according to how many targets we manage to generate.”²⁹ A separate source also told *+972 the Gospel* had allowed the IDF to run a “mass assassination factory” where the “emphasis is on quantity and not on quality”.³⁰

Similarly, Heidi Klaaf, an engineering director of machine learning at a cybersecurity firm said: “given the track record of high error-rates of AI systems... imprecisely and biasedly automating targets is really not far from indiscriminate targeting”.³¹

The use of AI could also make it more difficult to pursue accountability for those involved in the attacks on Gaza.³² Although humans still retain the legal culpability for strikes, it is unclear who is responsible if the targeting system fails, making it harder for Palestinians or human rights lawyers pursuing justice.³³ Who takes legal culpability: is it the analyst who accepted the AI recommendation? The programmers who made the system? The intelligence officers who gathered the training data?³⁴

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Israel's Weaponisation of Drones in Gaza



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Israel's Weaponisation of Drones in Gaza

Israel systematically uses quadcopters (small drones) to kill Palestinians from a close distance.³⁵ These drones have killed dozens of civilians, confirmed Euro-Med Monitor, by firing automatic machine guns mounted beneath the aircraft at random gatherings or by shooting directly at people.³⁶

Israel has started to use quadcopter drones in a systematic and widespread manner to carry out extrajudicial executions and premeditated killings of Palestinian civilians, according to testimonies gathered by Euro-Med Monitor.³⁷

On 12 February 2024, a quadcopter killed two brothers, Muhib Osama Ezz El-Din Abu Jama, 19, and Elyas Osama Ezz El-Din Abu Jama, 17, who was mentally and physically disabled, in Rafah's

Al-Shaboura refugee camp, in the south of the Gaza Strip.³⁸ The same day, another quadcopter killed two sisters, 16-year-old Mahmoud Alaa Awad Al-Assar and his 21-year-old sister, Asmaa Alaa Awad Al-Assar.³⁹

Israeli quadcopter drones also opened fire on Palestinians who had gathered to receive flour brought by United Nations trucks on 11 January.⁴⁰ 50 Palestinians were killed and dozens more were injured.⁴¹

Because of their frequent presence in the airspace, Euro-Med Monitor noted that these particular aircrafts are also being used to terrorise, intimidate, and harm the psychological well-being of Palestinians in the Gaza Strip.⁴²

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Israel's Weaponisation of Facial Recognition Technology in the West Bank



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Israel's Weaponisation of Facial Recognition Technology in the West Bank

Israeli authorities use an experimental facial recognition system known as Red Wolf to track Palestinians and automate harsh restrictions on their freedom of movement.⁵³ Red Wolf, alongside other surveillance technologies, entrenches the Israeli government's control over Palestinians, and maintains Israel's system of apartheid.⁵⁴

Red Wolf is deployed at military checkpoints in Hebron, where it scans Palestinians' faces and adds them to Israeli surveillance databases without their consent.⁵⁵ An Israeli commander stationed in Hebron said that soldiers are tasked with training and optimising Red Wolf's facial recognition algorithm so it can start recognising faces without human intervention.⁵⁶

Israel also uses facial recognition technology against Palestinians in occupied East Jerusalem, especially after protests and in areas surrounding illegal Israeli settlements.⁵⁷

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