Domain	Claim	Image Evidence	Reasoning Support Text	Label
Science & Technology	A new tattoo ink changes color depending on a person's glucose levels, meaning people with diabetes can use it to check their blood sugar levels.	Biosensing Tattoo to monitor blood sugar level	new <b>tattoo ink</b> incorporating <b>biosensor technology</b> has been developed to <u>change color based on glucose levels</u> , allowing for continuous health monitoring. This innovative technology, such as the Dermal Abyss tattoo, reacts to fluctuations in body chemistry, including glucose levels, and provides a non-invasive alternative to traditional glucose monitoring methods. <b>Color-changing tattoos</b> are particularly relevant for people with <b>diabetes</b> , as they enable real-time tracking of blood sugar levels without the need for pin-prick tests.	Supported
Culture & Entertainment	Gwen Stefani Pregnant With Blake Shelton's Baby Because She Was Spotted At Hospital?	BurgerKingTruth @fastfoodfan60 - 2d   2005/00/ Gwen Blefan has no plans of getting pengarent.  100 - 1	<b>Gwen Stefani's</b> pregnancy with <b>Blake Shelton's</b> baby have emerged, primarily sparked by observations of Stefani being spotted at a hospital parking lot and wearing flowy tops that some fans interpreted as concealing a baby bump. While such appearances have fueled speculation, other reports note that the couple has <u>put baby plans</u> on hold, with no confirmation of a pregnancy. These observations and mixed narratives provide the basis for evaluating the claim.	Refuted
Politics	Says Scott Walker enacted 'the biggest cuts to education in our state's history.	William   Vanisher   Interest   Februari	significant reductions in education funding. Key sources state that Walker enacted "the biggest cuts to education in our state's history." These cuts were part of broader fiscal policies, including the enactment of Act 10, which weakened the collective bargaining power of teachers' unions. Critics, including Tony Evers, argue that Walker's policies had lasting negative effects on public education. Public discourse frequently highlights Walker's prioritization of corporate tax cuts over educational investment.	Supported
Social & News	Photograph shows Hillary Clinton shaking hands with Osama bin Laden.	© FAKE	Hillary Clinton shaking hands with Osama bin Laden, but this image has been identified as a 2007 Photoshop hoax. Reports confirm that the photograph is fabricated and has no factual basis. Additionally, similar claims, such as Bin Laden being hosted in the White House, are also unsupported by credible evidence. This case highlights how digitally manipulated images are often used to spread misinformation	Refuted

Figure 1: Reasoning support text generation examples of MultiVerify.

## A CASE STUDY

We analyze reasoning support text generation examples from different domains on MultiVerify as shown in Figure 1, where bold text represents key concepts identified by the model and underlined text highlights critical information. An important function of reasoning support text is to objectively integrate and link all evidence, providing subsequent models with a clear reasoning chain and directional cues. For instance, in the first example, a possible reasoning chain is established by presenting the background of the development of a "novel tattoo ink incorporating biosensor technology" and its functional feature of "changing color based on glucose level variations," which provides the core technical information. Then, a specific example, such as the "Dermal Abyss tattoo", is cited to supplement the application context, illustrating its role in "real-time health monitoring". Finally, the potential benefits of "providing a non-invasive blood glucose monitoring alternative for diabetic patients" underscore the direct connection between the technology and its target users (diabetic patients). This integration of evidence combines technical features, application scenarios, and potential impacts, offering a clear reasoning direction (how the technology enables continuous blood glucose monitoring) and cues (biosensor, color change, non-invasive nature) to aid subsequent LMM analysis. Similarly, in the second example, the reasoning model can focus on core contradictions (such as hospital visits and the observation of loose clothing covering baby marks) alongside contrasting clues (e.g., reports of "suspended fertility plans"), providing an evidence framework and reasoning direction for assessing the truthfulness of the claim.

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