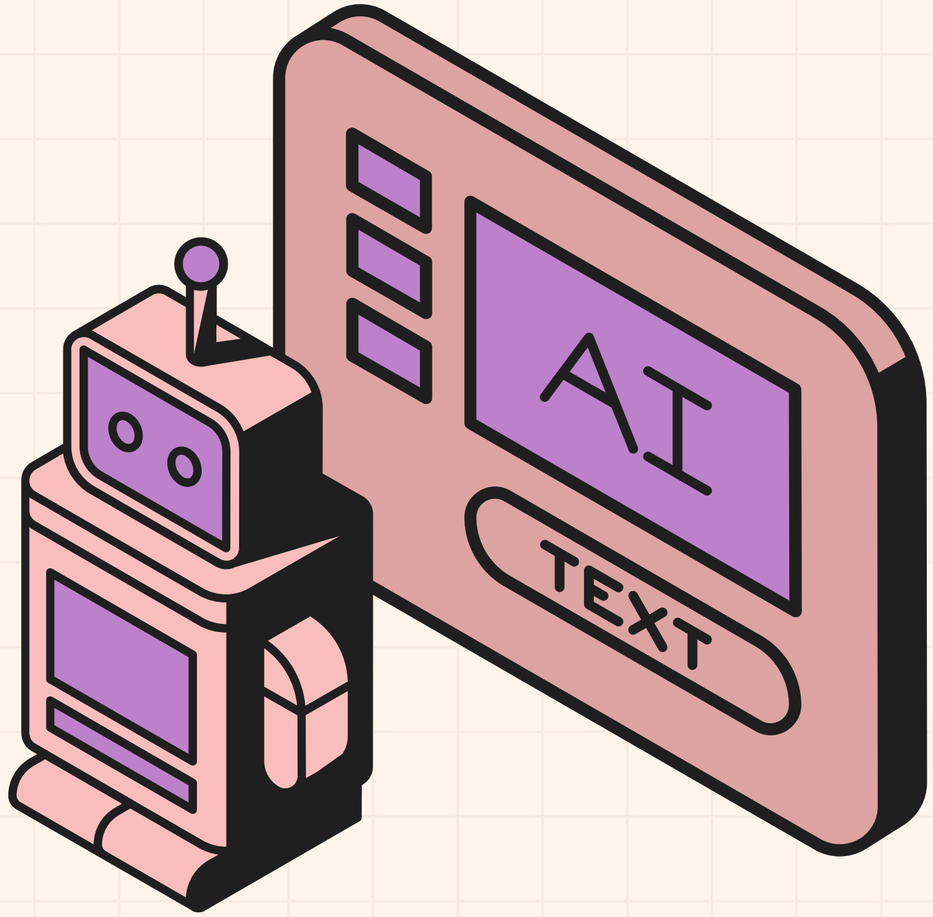
RAG
NEWS SUMMARY

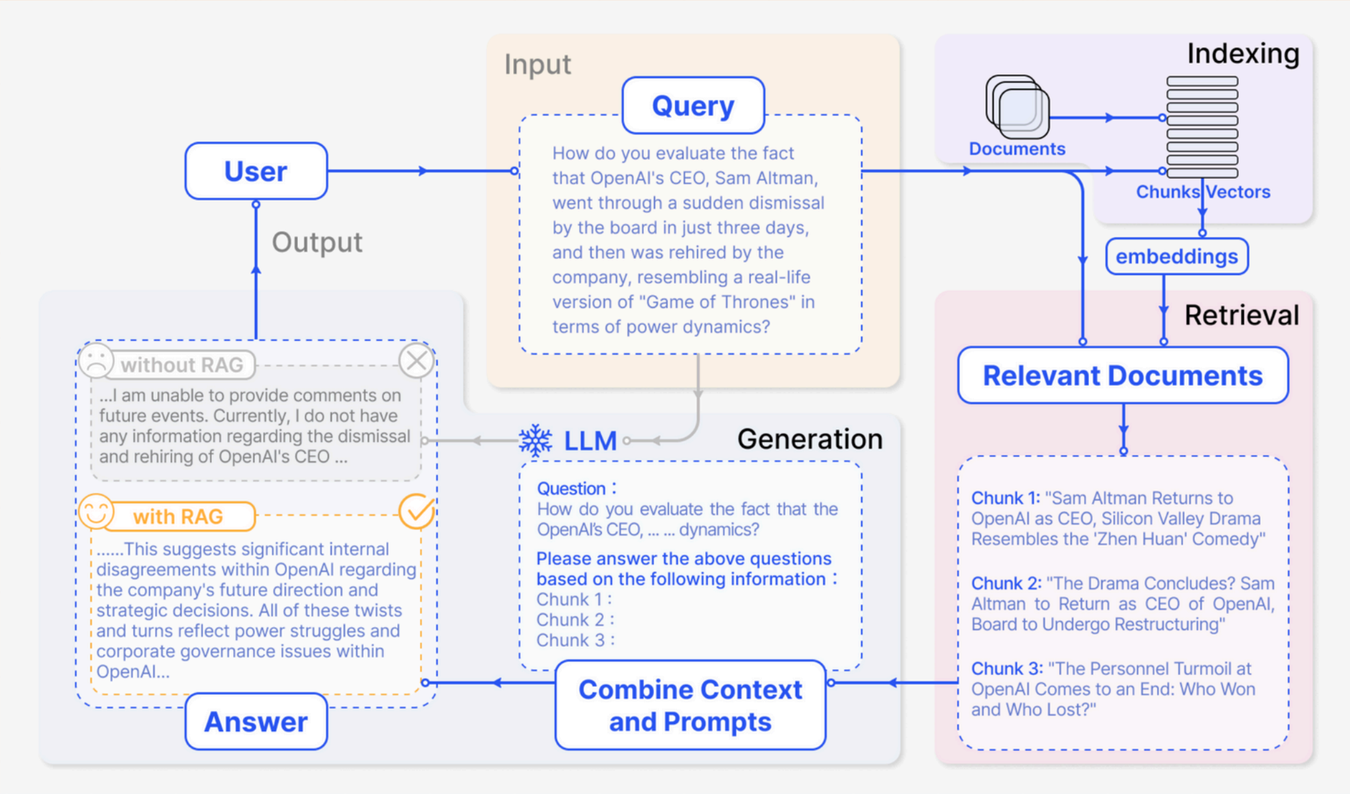
Piotr Szkoda
Martyna Kochalska
Bartłomiej Dmitruk



CZYM JEST RAG?

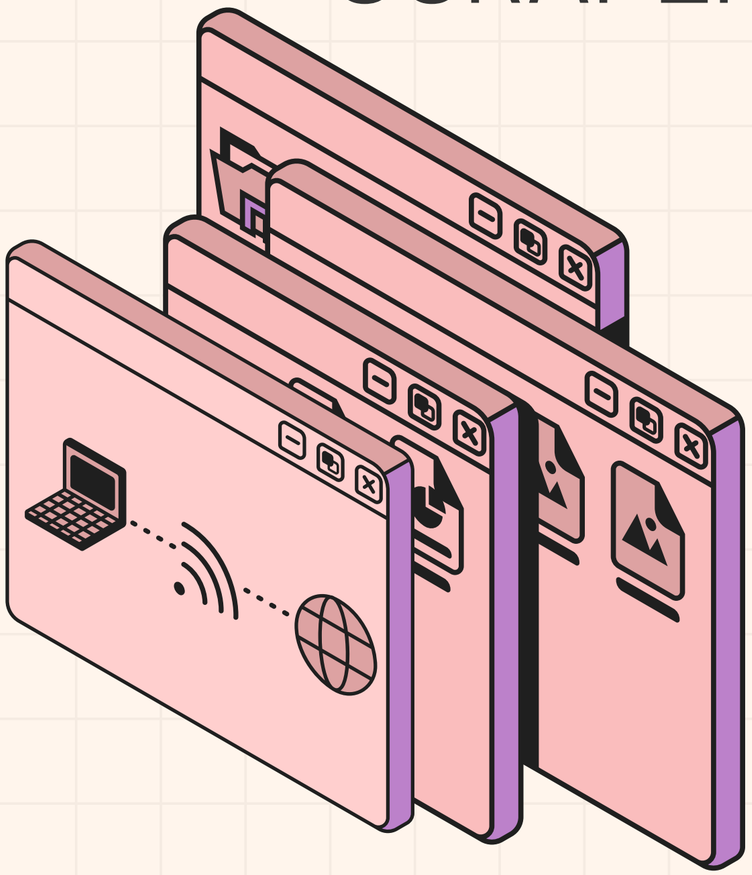
Retrieval Augmented Generation
czyli sposób by LLMy mniej halucynowały

Dzięki wyselekcjonowaniu powiązanych z zapytaniem informacji, model jest w stanie interaktywnie odnosić się do wiedzy, do której nie posiadał dostępu w czasie treningu



Source: Retrieval-Augmented Generation for Large Language Models: A Survey

SCRAPER



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Former Intel leaders raise $21.5M for Portland startup AheadComputing

AheadComputing, a Portland, Ore.-based startup led by former Intel execs, raised $21.5 million in a seed round led by Eclipse.

Compliance software startup SingleFile raises $9M

SingleFile Technologies, a legal tech startup based in Seattle that helps companies file compliance reports with government agencies, raised $9 million in new funding. LawSites first reported on the funding.

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SCRAPER

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DevTools listening on ws://127.0.0.1:49940/devtools/browser/57e891d3-0869-4424-8da0-d7a56194df5e
🔍 Fetching articles...
[29020:2280:0219/234704.116:ERROR:device_event_log_impl.cc(199)] [23:47:04.116] USB: usb_service_win.cc:105 S
etupDiGetDeviceProperty({{A45C254E-DF1C-4EFD-8020-67D146A850E0}, 6}) failed: Element not found. (0x490)
✅ Found 3 articles. Fetching content...

DevTools listening on ws://127.0.0.1:49956/devtools/browser/a405cd10-5000-4a44-9f56-270185da9df6
[33020:33024:0219/234715.953:ERROR:device_event_log_impl.cc(199)] [23:47:15.953] USB: usb_service_win.cc:1
SetupDiGetDeviceProperty({{A45C254E-DF1C-4EFD-8020-67D146A850E0}, 6}) failed: Element not found. (0x490)
[1408:14112:0219/234717.113:ERROR:command_buffer_proxy_impl.cc(325)] GPU state invalid after WaitForGetOf
InRange.
📄 Fetched 1/3 articles.

DevTools listening on ws://127.0.0.1:49998/devtools/browser/fc4f98e6-3aa4-4744-a848-a11f3fec5793
[34704:34708:0219/234725.174:ERROR:device_event_log_impl.cc(199)] [23:47:25.174] USB: usb_service_win.cc:1
SetupDiGetDeviceProperty({{A45C254E-DF1C-4EFD-8020-67D146A850E0}, 6}) failed: Element not found. (0x490)
📄 Fetched 2/3 articles.

DevTools listening on ws://127.0.0.1:50091/devtools/browser/1681d947-ed47-4de2-818d-e0178c52fe80
[34496:15792:0219/234734.843:ERROR:device_event_log_impl.cc(199)] [23:47:34.844] USB: usb_service_win.cc:105
SetupDiGetDeviceProperty({{A45C254E-DF1C-4EFD-8020-67D146A850E0}, 6}) failed: Element not found. (0x490)
Created TensorFlow Lite XNNPACK delegate for CPU.
Attempting to use a delegate that only supports static-sized tensors with a graph that has dynamic-sized tens
ors (tensor#-1 is a dynamic-sized tensor).
📄 Fetched 3/3 articles.

✨ All articles saved successfully ✨
Results saved to: scraped articles\articles 20250219 234748.json
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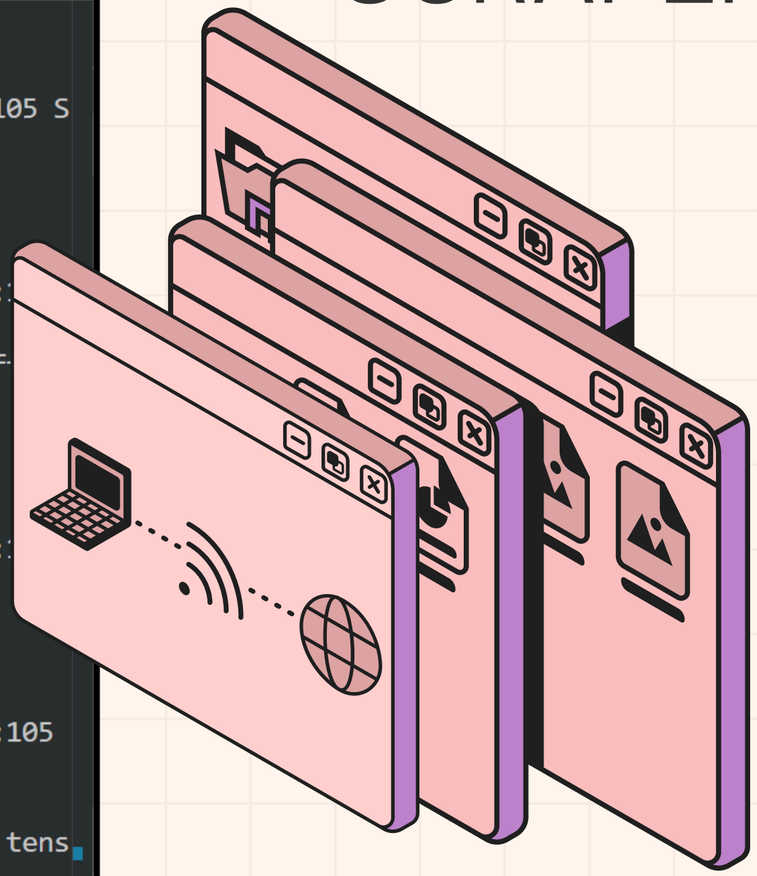
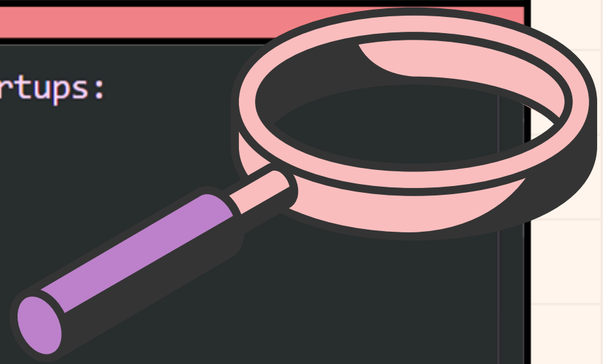


Page 404
NOT FOUND

STRESZCZENIE



AI will transform parts of healthcare – but slow adoption and sales cycles could impede startups:
Main Topics:
Generative AI's impact,
Regulation hindrance for startups,
Financial constraints among healthcare orgs.
Key Points & Details:
Tech investors often face challenges entering heavily-regulated healthcare;
Sales timelines typically take longer compared to non-healthcare industries;
Many healthcare organisations financially constrained, less inclined towards investments in new tech;
Seattle area sees increased VC investment in digital health despite regulatory hurdles;
Significant Conclusions/Finding: Despite setbacks, opportunities still exist for innovative ventures leveraging AI specifically tailored solutions like quiet ICUs and telehealth platforms amidst cautious uptake by traditional players driven partly by necessity rather than pure innovation appetite. Big Tech may eventually gain ground but requires time and resilience considering rapid market changes and stringent compliance norms. Macro-economic outlook encouraging leading to anticipation of enhanced activities next fiscal year albeit cautiously given current landscape conditions involving multiple factors impacting adoption rates significantly even if promising trends emerge gradually.

ZAPYTANIE


```
=== RAG Query Interface ===
Available commands:
  list, l               - Show available articles
  summarize             - Generate summary of all articles
  summarize <num/title> - Generate summary of specific article
  quit, q               - Exit the program

Enter your question or command:
What are the exact numbers of financial investment in AI and healthcare?

Searching relevant context...
Batches: 100%|████████████████████████████████████████████████████████| 1/1 [00:00<00:00,  6.58it/s]
Batches: 100%|████████████████████████████████████████████████████████| 1/1 [00:00<00:00,  3.80it/s]

Context:
Source 1: Venture investors poured more than $10 billion into digital health companies last year, with AI-focused startups tak
ing 37% of total funding, according to Rock Health.

Source 2: The rise of generative AI and other automation technologies will surely create efficiencies within the $4.5 trillion
 healthcare industry.

Source 3: There are a number of Seattle-area tech startups making moves in healthcare, including CalmWave, a “quiet ICU” compa
ny that recently raised $5.2 million, and Abett, which raised $11.6 million to tackle healthcare expenses.

Source 4: “Everything in healthcare moves at glacial pace,” said Nader Naini, a longtime managing partner at Frazier Healthcar
e Partners, which recently raised $2.3 billion for its 11th fund.
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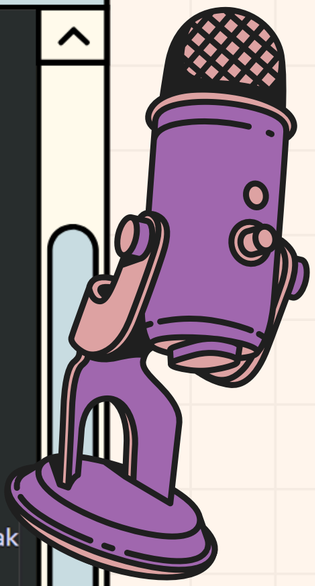
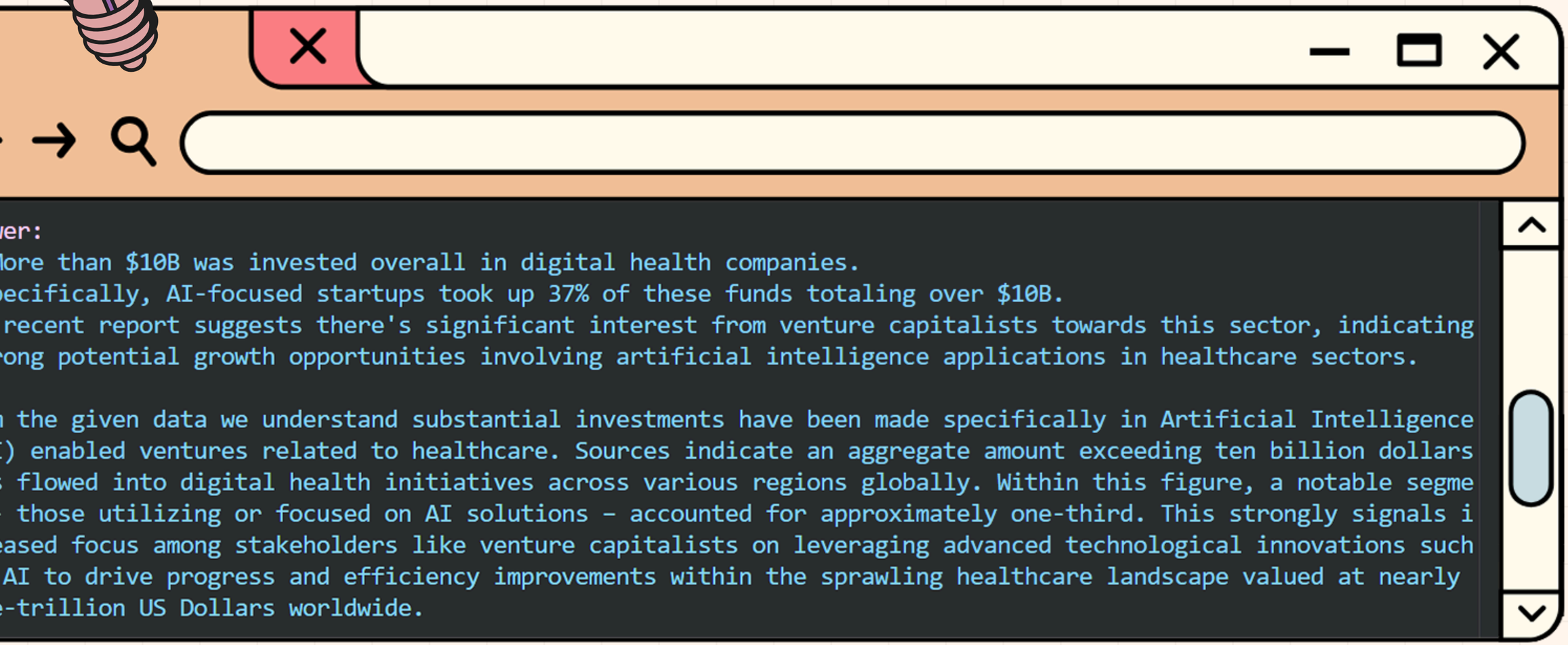


ODPOWIEDŹ



Answer:

- More than $10B was invested overall in digital health companies.
- Specifically, AI-focused startups took up 37% of these funds totaling over $10B.
- A recent report suggests there's significant interest from venture capitalists towards this sector, indicating strong potential growth opportunities involving artificial intelligence applications in healthcare sectors.

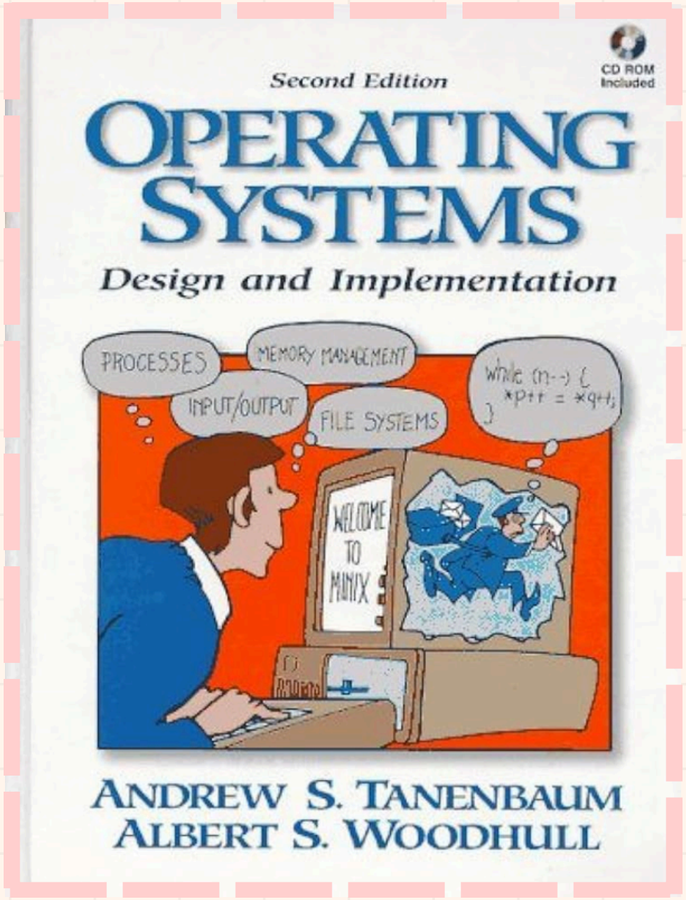
From the given data we understand substantial investments have been made specifically in Artificial Intelligence (AI) enabled ventures related to healthcare. Sources indicate an aggregate amount exceeding ten billion dollars has flowed into digital health initiatives across various regions globally. Within this figure, a notable segment - those utilizing or focused on AI solutions – accounted for approximately one-third. This strongly signals increased focus among stakeholders like venture capitalists on leveraging advanced technological innovations such as AI to drive progress and efficiency improvements within the sprawling healthcare landscape valued at nearly five-trillion US Dollars worldwide.

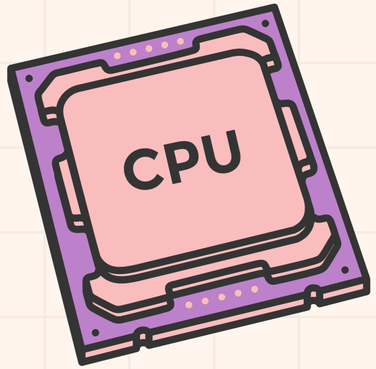
DEFINICJA SEMAFORA

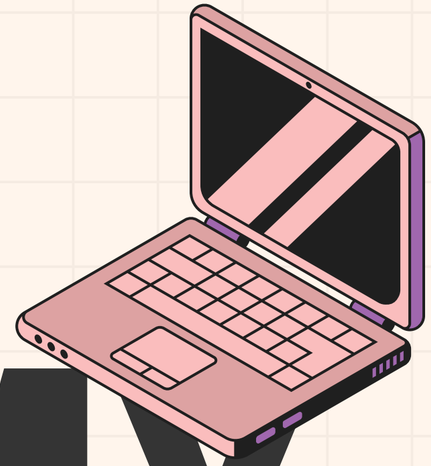
Enter your question or command:
What is the definition of a semaphore?

Answer:
-Semaphore can be defined as an object employed for managing access control among concurrent threads through operation symbols such as read (R), write(W) and up/down.
- Semaphores prevent deadlocks by ensuring only one thread at any given time interacts with shared resources.

- Operations include reading from and writing to the resource managed via the semaphore, along with adjusting its state accordingly ('up' increasing count while 'down' decreasing). I couldn't find that information. The definitions available suggest that a semaphore serves primarily as a mechanism for controlling simultaneous access to common data structures or resources when multiple processes attempt to utilize them concurrently. Specifically, these mechanisms allow specifying limits – represented numerically - upon how many processors may simultaneously interact with this restricted system component. For instance, under typical usage patterns indicated, if you wanted to ensure no more than two applications could modify a particular dataset simultaneously during critical sections of their execution flow, setting a semaphore's value appropriately would facilitate compliance with this constraint dynamically based on current operational states rather than static locks alone might offer enhanced flexibility without introducing additional locking overheads per se. Thus effectively acting both as safeguards against potential race conditions inherent within multi-threaded programming contexts AND enabling efficient management of limited shared resources across competing tasksets executing independently yet requiring coordinated interaction over some core assets.







DZIĘKUJEMY