

Data Science in Healthcare

One of the most powerful fighter jets owned by USA



Can you guess the name?

F-22 Raptor

by Lockheed Martin



Perhaps you are thinking I am mad

Data Science in
Healthcare

&

F22 Raptor

What's the link?

Here , is the **research finding** –

Missile defence analytics can spot “sepsis” before physicians

What's the business of Lockheed Martin?

- **Lockheed Martin** is the global security and aerospace company operates 50+ medical diagnostic clinics across the USA.
- It is using its missile defence insights to tackle an insidious foe: **sepsis**, which kills nearly 40% of the 750,000 people it affects each year.
- Lockheed Martin's application of machine learning technology has the potential to identify **sepsis** between fourteen and sixteen hours before physicians do.

Details about the research!

- In the area of missile defence, data is treated as constantly changing signals
- Machine learning algorithms could be used to detect and characterizing missiles. LM used this technique to critical care patient data.
- Sepsis costs hospitals more than \$12.5 billion per year, and can often be confused with flu symptoms in its early stages.
- But each hour treatment is delayed, the risk of mortality increases substantially

What was the problem?

- Currently, critical care systems have very high false alarm rates for sepsis because they don't look at the data over a long sequence of time.
- Think of it like a car alarm in a parking lot. Most people don't pay attention because they know it is probably a false alarm.
- That happens in hospitals also. Quite often, hospital critical care attendants ignore sepsis alerts because as many as half of the alerts are false."
- The biggest advance here is going to be in reducing the false alarm rate
- While the system has not yet been deployed in a hospital setting, it has been through a series of blind tests using real patient data with more than 90% accuracy.

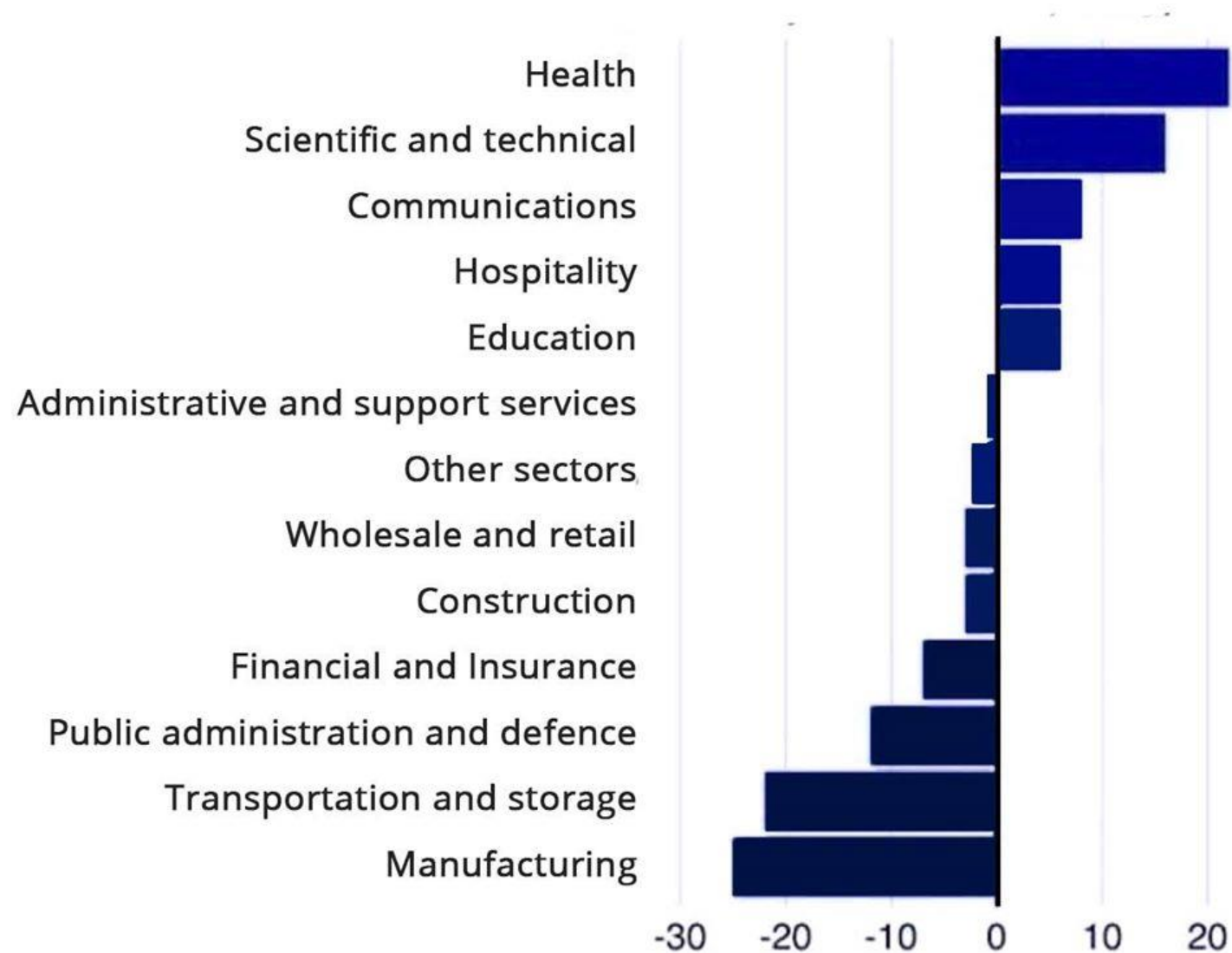
Welcome to the world
of

Healthcare Solutions

With Data Driven Insights

How AI could change the job market

Estimated net job creation by industry sector, 2017-2037



Major pain-points

- Healthcare Management System
- Disease Identification & diagnosis
- Patient care & engagement
- Drug discovery & Clinical Trials

Let's jump to the case



Apollo Hospitals
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