Abstract on Making an individual safer in the modern world by the use of technology.

Problem:

Making an individual safer in the modern world by the use of technology. Cyber Security is very vulnerable at the current state. How to improve?

Summary:

Cyber Security should be improved from the base. Even the government systems get hacked by amateurs. The use of fingerprints in current trends for security purposes (locking phones, payments, Aadhaar ID). There are many ways to trick the sensor and hack your way into confidential information. This makes the whole fingerprint scanning pointless and very insecure. Thus, either the whole scanning method requires to change or a new form of scanning needs to replace this(Iris/Retina Scanning).

Methodology:

Fingerprint scanning currently works with an optical scanner throwing light onto the finger and matching set stored points across the finger. Instead of this, the scanning could work in such a way that it could read fingerprints only when high pressure is applied and instead of matching set points, store and match the whole fingerprint (from the middle, the whole swirl pattern). This would greatly improve the security as it would be much much more difficult to hack it:
1. Using a cloth and trying to impersonate the fingerprint would fail.
2. Rare security flaws of mismatching would not occur.

Result:

The usage of fingerprint is more secured but slower. This makes it better for ID proof as well as bank related works for the individual.