ELECTRONIC –TEXTILES TECHNOLOGY

BY

CH.SRINIVAS 13R91A0472

UNDER THE GUDIANCE OF

N.ARAVIND SIR

(ASST.PROF)

INTRODUCTION

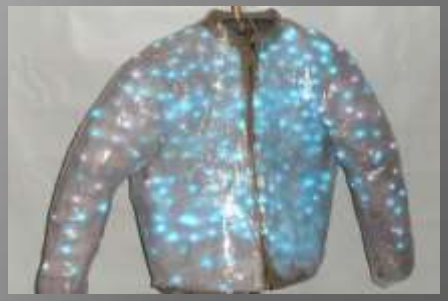
- Electronic textiles, are fabrics that can function electrically as electronics and behave physically as textiles.
- Which enable computing ,digital components and electronics to be embedded in them.
- Use textile manufacturing techniques.

HISTORY

- Early 1990's MTS students started research on smart clothing for military use.
- Present started to integration medical uses into clothing.

CURRENT TECHNOLOGY

- Zoll life vest.



- Vivo metrics life shirt.

- Smart shirt.

LIMITATION OF CURRENT TECHNOLOGY

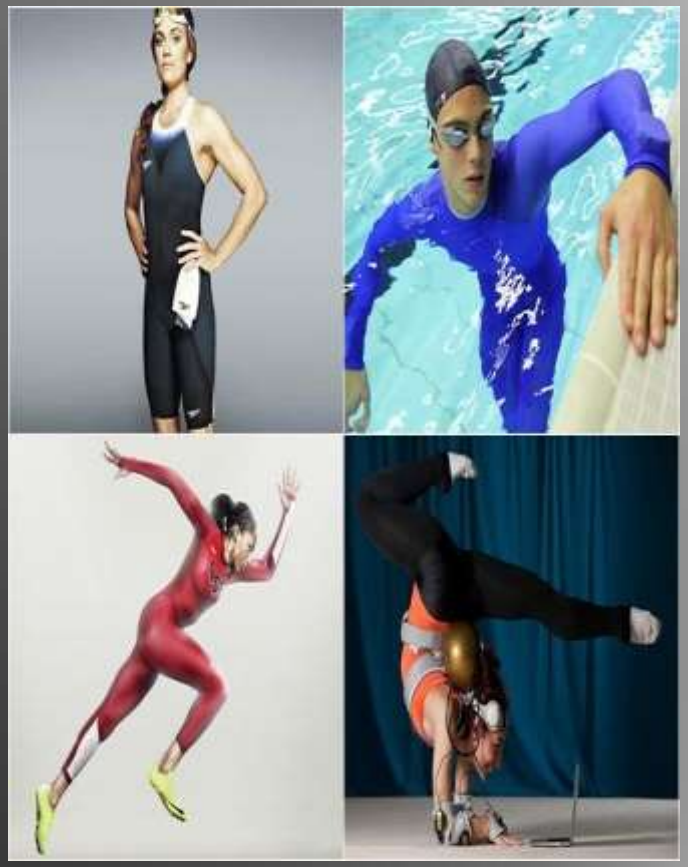
- Not waterproof.
- Cost :if it is ,there are additional costs that need to be covered.

DESIGN ISSUES FOR WEARABLE E-TEXTILS

- Human body and motion.
- Networking.
- Power consumption.
- Environment issue and
- Software execution.

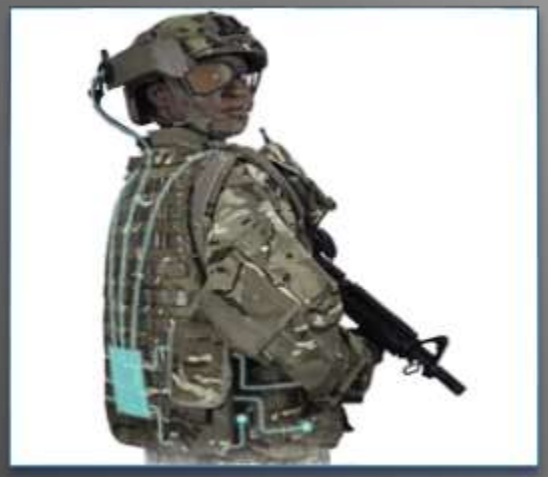
PROPOSED SYSTEM (Future technology)

- Weather proof and waterproof systems.
- Smart textiles for children.
- Commercialization.
- Automatic calibration.



APPLICATIONS

- Sensor network communications.
- Physical therapy.
- Human protection.



- Live or work in hard conditions like as fire ,cold , sea and military.

ADVANTAGES

- Flexible
- Large surface area for sensing.
- Invisible to other.
- Cheap manufacturing.
- Elastic and extendable.

CONCLUSION

- ‘Electronic textile’ is a result of the convergence of microelectronics with textiles.
- Surrounding us in our daily life.
- Used in clothing ,home textiles ,military, medicals etc.

Thank you