BYTE QUEST

Vasavi College Of Engineering

Department Of Computer Science and Engineering

October 15, 2015

Volume 11

CONTENTS

Byte Quest is the article published by the CSE dept of Vasavi College of Engineering regarding the latest innovative Technologies and Software that have been emerged in the competitive world. The motto of this article is to update the people regarding the improvement in technology. The article is designed by the active participation of students under the guidance of faculty coordinators.

- Good ,bad or indifferent if you are not investing in new technology , you are going to be left behind.

  -Philip Green

- Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road.

  -Stewart Brand.

FACULTY COORDINATORS

DIVYA (ASST. PROFESSOR)

T.NISHITHA (ASST. PROFESSOR)

STUDENT COORDINATORS

R NIKITHA(4/4 CSE-A)

K ABHINAY(4/4 CSE-B)

AMREEN KOUSAR(3/4 CSE-A)

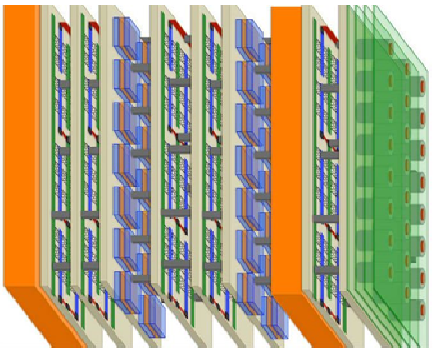
KRISHNA CHAITHANYA(3/4 CSE-B)

T AISHWARYA(2/4 CSE-A)

RAHUL(2/4 CSE-B)

'SKYSCRAPER' CHIP COULD MAKE COMPUTERS RUNS 1,000 TIMES FASTER.

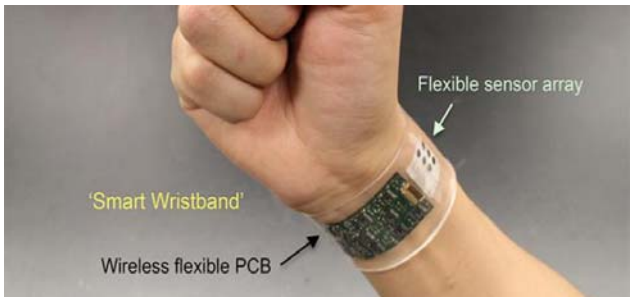
Engineers in US have invented a new computer chip that replaces the silicon in conventional chips with nano-materials that can be stacked, changing the landscape from a resource-heavy single-storey layout to a more efficient 'skyscraper' approach. Their new multi-layer chip, called N3XT, is designed to break data bottlenecks by laying processors and memory chips on top of each other like floors in a skyscraper, rather than side by side. "When you combine higher speed with lower energy use, N3XT systems outperform conventional approaches by a factor of a thousand," says one of the researchers, H.S.Philip Wong from Stanford University.



The concept behind the N3XT (Nano-Engineered Computing Systems Technology) is computer systems that can be built more like a city, filled with super-efficient skyscrapers that distance that could fit more processors and chips into tinier spaces, with less distance between them.

- M.ADARSH(CSE A 2/4)

WEARABLE SWEAT SENSOR MONITORS YOUR PERSPIRATION.



Human sweat contains physiologically rich information making it an attractive body fluid for non-invasive wearable sensors. According to the researchers, the metabolites and electrolytes contained in human sweat say a lot about the health of a person, and could help replace invasive means of examining one's wellbeing.

The prototype includes five sensors on an array connected to a flexible circuit board. The array of sensors measures metabolites (glucose and lactate) and electrolytes (sodium and potassium), and also monitors skin temperature, while the circuit board analyses the data collected and can transmit it to other devices. This device can be easily shrinked by integrating all the circuit functionalities into a single chip. The fact that the device can be worn constantly also means it's capable of collecting a much broader and less interrupted stream of health data.

- RAMYA (CSE B 3/4)

BUG EYES : TINY 3D GLASSES CONFIRM INSECT 3D VISION

Miniature glasses have proved that mantises use 3D vision - providing a new model to improve visual perception in robots. Most knowledge about 3D vision has come from vertebrates.

In a specially-designed insect cinema, it is shown that it needs to be 'old school' 3D glasses for tests to work on mantises. While in humans that would be with red and blue lenses, red light is poorly visible to mantises so they have custom-made glasses with one blue and one green lens.

Initial testing of the most widely-used contemporary 3D technology used for humans - using circular polarization to separate the two eyes images - didn't work because the insects were so close to the screen that the glasses failed to separate the two eyes' images correctly.

The researchers of New Castle University say they will continue examining the algorithms used for depth perception in insects to better understand how human vision evolved and to develop new ways of adding 3D technology to computer systems.

C.CHANDANA(CSE A 2/4)