



# Computer Society of India

Institute Membership No:100859

**Dr. SIVANTHI ADITANAR COLLEGE OF ENGINEERING**

**TIRUCHENDUR**

**DEPARTMENT OF COMPUTER SCIENCE & *ENGINEERING***

***UG & PG***

**DEAR READER,**

**IT'S A GREAT PLEASURE TO PRESENT BEFORE YOU THE NEWSLETTER OF  
COMPUTER SOCIETY OF INDIA STUDENTS' CHAPTER WHICH HELPS THE  
ENTIRE CSI FRATERNITY TO KNOW THE ACTIVITIES OF THE STUDENTS'  
CHAPTER FROM TIME TO TIME.**

# **Volume 1 No.2-2018**

# Computer Society of India

## Students' Chapter

### OFFICE BEARERS

<b>Patron</b>	: Dr. G.Wiselin Jiji,	Principal & Professor
<b>Co-Ordinators</b>	: Dr. R.Jensi Mrs. S.Poornima	AP/CSE AP/ CSE
<b>Secretary</b>	:Mr.A.Krishnakumar@Gokul	IV CSE 'A'
<b>Treasurer</b>	: Mr.P.Ram Priyadharshan	IV CSE 'B'
<b>Joint Secretary</b>	:Mr.L.Manikandan	III CSE 'A'

### LIST OF ACTIVITIES CONDUCTED (2018-2019)

S.No	Date	Event	Chief Guest/Resource Person/Jury
1.	18/07/2018	Industry Oriented Workshop on App Development using ZOHO Cliq	Mrs.Manasa, Ms.Princy Christy, Mr.Thiyagarajan and Mr. Navaneetha Krishnan, ZOHO Experts
2.	19/07/2018	Code Debugging Contest	Ms.R.Naveena Devi, AP/ CSE and Ms.S.Vasudevi, AP/CSE
3.	25/07/2018	Paper Presentation Contest	Mrs.S.V.Anandhi, AP/ CSE and Mrs.D.Sindhu, AP/CSE
4.	11/08/2018	Short term training on HTML and CSS	Ms.R.Naveena Devi,AP/CSE, Mrs.S.Poornima, AP/CSE and Ms.S.Vasudevi,AP/CSE
5.	23/08/2018	Short Term Training in Software Programming	Mr.T.Saravana Kumar,AP/CSE, Mr.D.Kesavaraja,AP/CSE, Mrs.S.V.Anandhi,AP/CSE
6.	10/09/2018	Web Designing Contest	Mrs.P.Chanthiya,AP/CSE Mrs.D.Mary Ponrani,AP/CSE Mrs. K.Bergin Shyni,AP/CSE
7.	11/09/2018	Code Debugging Contest	Ms.A.Annie Jesus Suganthi Rani,AP/CSE

**Events with photo**

1. **Industry Oriented Workshop on App Development using ZOHO Cliq** was organized on 18/07/2018 for UG students. Sessions were handled by Mrs.Manasa, Ms.Princy Christy, Mr.Thiyagarajan and Mr. Navaneetha Krishnan, ZOHO Experts.



2. **Code Debugging Contest** was conducted for UG Students of CSE on 19/07/2018. Ms.R.Naveena Devi, AP/CSE and Ms.S.Vasudevi AP/CSE acted as jury for the contest.



- 3. Paper Presentation Contest** was conducted for UG Students of CSE on 25/07/2018. Mrs.S.V.Anandhi, AP/CSE and Mrs.D.Sindhu AP/CSE acted as jury for the contest.



- 4. Short term training on HTML and CSS** was organized for UG Students of CSE on 11/08/2018. Sessions were handled by Ms.R.Naveena Devi,AP/CSE, Mrs.S.Poornima, AP/CSE and Ms.S.Vasudevi,AP/CSE.





5. **Short Term Training in Software Programming** was organized for UG Students of CSE on 23/08/2018. Mr.T.Saravana Kumar,AP/CSE, Mr.D.Kesavaraja,AP/CSE, Mrs.S.V.Anandhi,AP/CSE handled the session.



6. **Web Designing Contest** was conducted for UG Students of CSE on 10/09/2018. Mrs.P.Chanthiya,AP/CSE, Mrs.D.Mary Ponrani,AP/CSE, Mrs. K.Bergin Shyni,AP/CSE judged the contest.



7. **Code Debugging Contest** was conducted for UG Students of CSE on 11/09/2018. Ms.A.Annie Jesus Suganthi Rani,AP/CSE, Mrs.M.Antony Vijaya,AP/CSE judged the contest.



## LET'S USE HUMANOID ROBOTS TO GROW TRANSPLANT ORGANS

By [Jeya](#) Kartheesan, II CSE 'A'

Scientists are already growing [muscles](#), [bones](#), and [mini-organs](#) in the lab. But these tissues are generally small, simple, and kinda wimpy. That's partly because a Petri dish is no match for the human body.

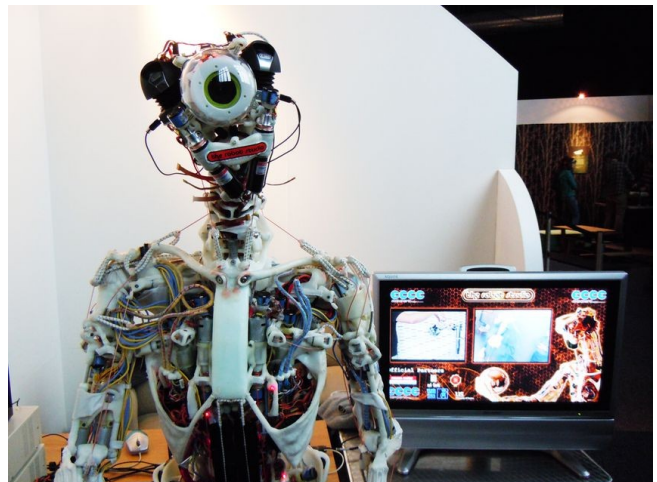
Take, for example, skeletal muscle.

Bioreactors—typically warm, moist vats where cells are grown—might induce some simple movements in lab-grown muscles, but it's nothing like the multidirectional bending and stretching of the human body, which helps our muscles grow and get stronger. That's why two scientists from Oxford University are proposing that we use humanoid robots to grow engineered tissues instead. Their article was [published Wednesday in Science Robotics](#).

"There is no better bioreactor than the human body itself," says study co-author and tissue engineer Pierre Mouthuy, "so the better we can copy that environment, the better our chances to obtain functional engineered tissues are going to be."

Robots like [Kenshiro](#) and [Eccerobot](#) replicate human anatomy in intricate detail, and the authors write that we might be able to use them to grow better tissue grafts that can be transplanted into ailing humans.

For tendons, ligaments, bone, and cartilage, humanoid robots could simulate lifelike architecture and movements of various types and directions. This could help more cells to develop and differentiate into complex tissues.





What might these bioreactors look like? Perhaps scientists could immerse the robotic body parts in a bioreactor's nutrient broth—but then you risk corroding the machine's metals or ruining its electronics, says Mouthuy. Another solution may be to encase the engineered tissue in a membrane or artificial skin, so that the developing tissue can have all the moisture and nutrients it needs, while the robot stays dry. Mouthuy and study co-author Andrew Carr are already working on some prototypes, and hope to soon find out whether the humanoid bioreactor concept is actually feasible.

If they work, humanoid bioreactors might eventually be able to nurture more complex tissues and organs, such as lab-grown hearts. Plus, they might lead to robots that are safer for humans to be around, the authors note, as well as other robots advances—such as "biohybrid humanoids," whose movements are controlled by cells instead of machinery.

## BLOCK CHAIN

By, S.Harihara Sudhan, II CSE 'A'

**Blockchain**, originally, blockchain is a growing list of records, called *blocks*, that are linked using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a Merkle tree).

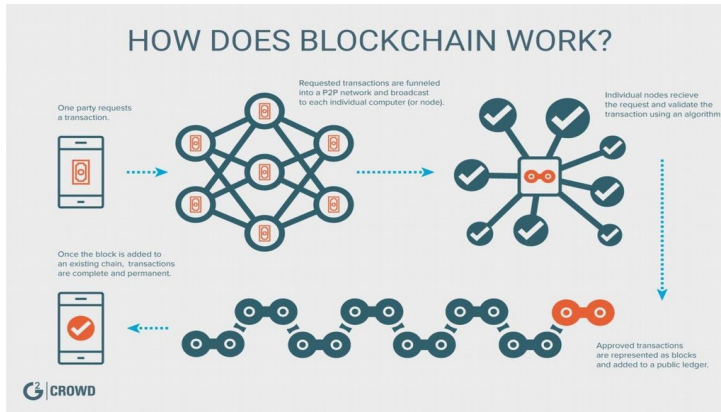
By design, a block chain is resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way". For use as a distributed ledger, a blockchain is



typically managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without alteration of all subsequent blocks, which requires consensus of the network majority. Although blockchain records are not unalterable, blockchains may be considered secure by design and exemplify a distributed computing system with high Byzantine fault tolerance. Decentralized consensus has therefore been claimed with blockchain.

***‘The Bitcoin bubble may ultimately turn out to be a distraction from the true significance of the blockchain.’***

Blockchain was invented by a person (or group of people) using the name Satoshi Nakamoto in 2008 to serve as the public transaction ledger of the cryptocurrency bitcoin. The identity of Satoshi Nakamoto is unknown. The invention of the blockchain for bitcoin made it the first digital currency to solve the double-spending problem without the need of a trusted authority or central server. The bitcoin design has inspired other applications, and blockchains that are readable by the public are widely used by cryptocurrencies. Blockchain is considered a type of payment rail. Private blockchains have been proposed for business use. Sources such



as *Computerworld* called the marketing of such blockchains without a proper security model "snake oil".

# THANK YOU