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NEWS LETTER

Department of Computer Science & Engineering



A Half- Yearly Newsletter

TECH TIMES

June 2018

**PRASAD V. POTLURI SIDDHARTHA
INSTITUTE OF TECHNOLOGY**

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Contents

-  ***Guest Lectures / Workshops Organized***
-  ***Faculty Achievements***
-  ***Faculty Publications/ Conferences***
-  ***Workshops Attended by Faculty***
-  ***Students Achievements***
-  ***Student Articles***

Department of Computer Science & Engineering

The Department of Computer Science and Engineering was formed in the year 1999. The department has started B.Tech program with an initial intake of 40 in the year 1999 and 120 from 2007 onwards. The department has also started M.Tech program with an initial intake of 18 in the year 2006, and an increase in the intake to 36 in the year 2011. The department is accredited by NBA in the year 2007 for a period of 3 years and was reaccredited in the year 2012 for a period of 2 years. And was reaccredited in 2016 for a period of 3 years.

The department has 32 qualified teaching staff with 5 PhDs and 27 M.Techs. Our faculty members aim at delivering top class education blending their rich research experience with class room teaching. The entire faculty is involved in research activities and has published/presented papers in national and international journals and conferences.

The department has ACM student chapter and CSI student chapter. The department offers various certification training programs to students like APSSDC Mobile App Development Program to make the students well prepared to face the industry. The department has also established Intel FICE Lab to encourage students with new technologies.

Guest Lectures / Workshops Organized

1. The Department of CSE & IT has organized “*2nd International Conference on Smart Computing & Informatics (SCI-2018)*”, Springer SIST Series from 27-28 Jan’18.



Fig1: 2nd International Conference on Smart Computing & Informatics

Resource Persons:

- a. Dr. Nabil Khelifi, Senior Editor, Germany
- b. Dr.B.Majhi, IIIT, Kanchipuram
- c. Dr.Lakhmi C.Jain
- d. Dr.Roman Senkerik, Tomas Bata University, Czech Republic
- e. Dr.Naeem Hannon, MEMBER IEE, Malaysia
- f. Dr.B.K.Panigrahi, IIT, Delhi
- g. Dr.Parag Kulkarni, CEO, Iknowlation Research Labs Pvt ltd.
- h. Dr.Nilanjan Dey, Kolkata
- i. Dr,Vikrant Bhateja,SRMPGC, Lucknow
- j. Dr.Swagatham Das, ISI, Kolkata
- k. Dr.S.K.Udgata, UoH, Hyderabad
- l. Dr.Prasant Kumar Pattnaik, Senior Member IEEE, Bhubaneswar
- m. Dr.J.R.Mohanty, Bhubaneswar
- n. Dr.K.Govinda, VIT, Vellore
- o. Dr.Sireesha Rodda, GITAM, Visakhapatnam
- p. Dr.Hyma Janapana,GITAM, Visakhapatnam
- q. Dr.Paladuga Satish Rama Chowdary, Vishakhapatnam

- The Department of CSE has organized 2-day training on **Core Networking of ISP and Software's implemented in BSNL** from 06-2-2018 to 07-2-2018.



Fig 2: Two day training on Core Networking of ISP and Software's implemented in BSNL

Resource Person: Mr. P. Raju, Sr.SDE, BSNL Krishna District Region

Program Co-ordinator: D. Lokesh Sai Kumar

- The Department of CSE has organized 3-day workshop on **PYTHON** in association with APSSDC from 20-2-2018 to 22-2-2018.



Fig3: Three day workshop on PYTHON

Resource Persons:

- Ch. Avinash
- B. Ravi Sastri

Program Co-ordinator: A. Vanamala Kumar

- The Department of CSE has organized 2-day workshop on **3D printing** in association with CSI STUDENT BRANCH PVPSIT from 22-2-2018 to 23-2-2018.



Fig4: Two day workshop on 3D-Printing

Resource Persons:

- a. Ch Mohan Sumanth
- b. Ch. Kishore Reddy

Program Co-ordinators:

- a. K. Vijay Kumar
- b. A. Madhuri

5. The Department of CSE and IT jointly organized A Three Day FDP on "**Block Chain Technology**" from 21-3-18 to 23-3-18.



Fig5: Three day FDP on Block Chain Technology

Resource Persons:

- a. Mr. V. Srinivasa Raju, Director, Aykas Innovations Pvt. Ltd, Visakhapatnam.
- b. Mr. G. V. Rajesh, Sr. Analyst, Optum united health care group, Hyderabad.
- c. Mr. V. Sridhar, Information Security Architect, Optum united health care group, Hyderabad.

6. The Department of CSE has organized a Guest Lecture on "**Higher Studies in USA**" under ACM student chapter on 27-06-2018



Fig6: Guest lecture on “Higher Studies in USA

Resoure Person: Dr. Atluri. Gowtham, University of Minnesota, Cincinnati, USA

7. The Department of CSE has organized a Guest Lecture on “**GATE Awareness Program**” by Ms. Navatha on 28-06-2018.
8. The Department of CSE has organized an **Orientation program** for I year students on 18-06-2018.



Fig7: Orientation program for Ist Year Students by HOD

Faculty Achievements

1. **Mr. N.V Ramana Gupta** published patent for “**Mobile Equipment and A Modeling Method Using Natural Mating Algorithm**” with patent numbered 201741046420.
2. **Dr. Suresh Chandra Satapathy** was the key note speaker and session chair for **Third International Congress on Information and Communication Technology** held at London, United Kingdom | February 27-28, 2018.
3. **Dr. Suresh Chandra Satapathy** was the key note speaker for **International Conference on Artificial Intelligence and Cognitive Computing (AICC-2018)** from 02-02-2018 to 03-02-2018 at MLR Institute of Technology, Hyderabad.
4. **Dr. Suresh Chandra Satapathy** was the Guest of Honor for **International Conference on Micro-Electronics, Electromagnetic and Telecommunications (ICMEET-2K18)** from 03-02-2018 to 04-02-2018 at GVP College of Engineering for Women, Visakhapatnam.
5. **Dr. Suresh Chandra Satapathy** was appointed as Editor of ICSES Transactions on Evolutionary and Metaheuristic Algorithms
6. **Mr. A. Vanamala Kumar** has received the **Certificate of Appreciation** for his Instrumental Role as SPOC for the NPTEL Local Chapter PVPSIT rated A based on the performance in NPTEL Online Certification Courses at IIT Madras on 25th Jan’18.
7. **Mrs. V. Siva parvathi** has won **II prize in Tennicoit** in Siddhartha Academy Inter Institutional Tournaments at Sri Durga Malleswari Siddhartha Mahila Kalasala, Vijayawada on 19th Jan’18.
8. **Mr. M. Ram Gopal** has won **II prize in Chess** in Siddhartha Academy Inter Institutional Tournaments at Sri Durga Malleswari Siddhartha Mahila Kalasala, Vijayawada on 19th Jan’18.
9. **Mr. M. Ram Gopal and Mr. N. Chaitanya Krishna** has won **I prize in Volley Ball** in Siddhartha Academy Inter Institutional Tournaments at Sri Durga Malleswari Siddhartha Mahila Kalasala, Vijayawada on 19th Jan’18.
10. **Dr. A. Sudhir Babu** acted as a **Judge** in the Technical paper Contest in the Dept of CSE on 16-02- 2018 at AFOSEC-2018, VRSEC, Vijayawada.
11. **Dr. PESN Krishna Prasad** has participated in **INDIA ELECTRONICS WEEK 2018** held from 07-02-2018 to 09-02-2018 at Karnataka Trade Promotion Organization, Bengaluru.
12. **Dr. B. Janakiramaiah** has applied a project" Development of Intelligent models or automatic alert Generation in a Surveillance Systems for Smart city Environment using Deep Learning Algorithm" to SERB with R.No.:352018001041

13. **Dr. S C Satapathy** acted as the resource person for the FDP on “Evolutionary and Nature Inspired Meta-Heuristic Algorithms for Engineering Applications” during 16th and 17th April 2018.
14. **Mr. A. Vanamala Kumar** has received a certificate of Appreciation award in recognition of his role as Mentor for the NPTEL online Certification Course “Programming Data Structures & Algorithms using PYTHON”
15. **Mr. A. Vanamala Kumar** has delivered a talk on “NPTEL online Certification Courses and its benefits” on 30th June, 2018.
16. **Mr. A. Vanamala Kumar** has received an “ACTIVE SPOC award” for his Instrumental Role as SPOC for the SWAYAM-NPTEL Local Chapter PVPSIT for JAN-JUNE 2018 NPTEL Online Certification Courses

Faculty Publications / Conferences

1. **Dr. Suresh Chandra Satapathy** has published a paper entitled “**Enhanced evolutionary computing based artificial intelligence model for web-solutions software reusability estimation**” in Cluster Computing The Journal of Networks, Software Tools and Applications in Jan’18.
2. **Mr. S. Phani Praveen** has presented a paper on “*An effective multi - faceted cost model for Auto scaling of servers in cloud.*” in *2nd International Conference on Smart Computing & Informatics (SCI-2018)*, Springer SIST Series organized by Dept of CSE & IT, PVPSIT from 27-28 Jan’18.
3. **Dr. PESN Krishna Prasad** has presented a paper on “**IOT Based Smartbots for Smart City using MCC and Big Data**” in *2nd International Conference on Smart Computing & Informatics (SCI-2018)*, Springer SIST Series organized by Dept of CSE & IT, PVPSIT from 27-28 Jan’18.
4. **Dr. Suresh Chandra Satapathy** has published a paper “Antenna Array Synthesis Using Social Group Optimization” in International Conference on Micro-Electronics, Electromagnetic and Telecommunications (ICMEET-2K18) from 03-02-2018 to 04-02-2018 at GVP College of Engineering for Women, Visakhapatnam
5. **Dr. Suresh Chandra Satapathy** has published a paper “DWT-PCA Image Fusion Technique to Improve Segmentation Accuracy in Brain Tumor Analysis” International Conference on Micro-Electronics, Electromagnetic and Telecommunications (ICMEET-2K18) from 03-02-2018 to 04-02-2018 at GVP College of Engineering for Women, Visakhapatnam.
6. **Dr. Suresh Chandra Satapathy** has published a paper On the Design of Fractal UWB Wide-Slot Antenna with Notch Band Characteristics International Conference on Micro-

Electronics, Electromagnetic and Telecommunications (ICMEET-2K18) from 03-02-2018 to 04-02-2018 at GVP College of Engineering for Women, Visakhapatnam.

7. **Mrs. V Siva Parvathi**, has presented a paper "Study on Current in Grammatical Inference in Computational Linguistics" in 3rd International Conference on Technical advancements in Computer Science and Engineering (ISTACSE-2018) ISBN: 978-93-83038-53-4 in Feb-2018
8. **Mrs. M Sailaja**, has presented a paper "Finding Shortest Path for Community Structures with Deep Learning" in 3rd International Conference on Technical advancements in Computer Science and Engineering (ISTACSE-2018) ISBN: 978-93-83038-53-4 on Feb-2018
9. **Dr. Suresh Chandra Satapathy** has published a paper "Cost-effective and fault-resilient reusability prediction model by using adaptive genetic algorithm based neural network for web-of-service applications" in Cluster Computing The Journal of Networks, Software Tools and Applications.
10. **Mrs. V. Siva Parvathi and Mrs. M. Sailaja** has presented a paper "Protected and Flexible Multi keyword Score Search Model Over Encoded Cloud Data" in International Conference on Engineering Science & Technology and Management on 30th June'18.
11. **Mrs. T. Sri Lakshmi and Mrs. A. Madhuri** has presented a paper "Validity Index Utilizing Supervised Classifiers on Clusters" in International Conference on Engineering Science & Technology and Management on 30th June'18.
12. **Mrs. A. Ramana Lakshmi and Mrs. A. Divya** has presented a paper "A Study on Performance analysis of Hierarchical and Sparse Hierarchical Clustering" in International Conference on Engineering Science & Technology and Management on 30th June'18

Workshops/Faculty Development Programs attended by the faculty

1. **Dr.B. Janaki Ramaiah and Ms .A. Divya** participated in FDP on "Quality Improvement Program on Question Paper Setting and Student Evaluation" at VRSEC from 16th April'18 to 18th April'18.
2. **Mr. P. Anil Kumar** participated in FDP on "Data Structures and Algorithms" at Madanapalle Institute of Technology and Science from 28th May'18 to 1st June'18.
3. **Mrs. T. Sri Lakshmi** has participated in summer school on "Advances in Speech Processing Applications" held during 14-19 May'18 at IIIT Hyderabad.
4. **Mr. A. Yuva Krishna** has participated in FDP on "ANN and Deep Learning" held during 11-15 June'18 at NIT Warangal.

5. **Ms. D. Swapna, Ms. A. Madhuri, Mr. S Phani Praveen and Mr. A. Vanamala Kumar** has attended two day workshop on ‘AWS Skill Guru (Cloud Computing)’ organized by APSSDC at Vignan University Guntur from 18th - 19th June 2018.

Student Achievements

1. **Mr.D. Akhil** 14501A0527 got All India **453** rank in **GATE**.
2. **Mr.K Mani Kanta Krishna Kumar** 14501A0552 got All India **8643** rank in **GATE**.
3. **Mr.G Ram Prasad** 14501A0541 got All India **8643** rank in **GATE**.
4. **Mr.K. Venkata Sai** of IV year was placed in Prime soft Enterprise System as Associate
5. **Mr.K.Sai Sudheer** and **Mr.G.Ram Prasad** of Final year got selected for the company Teja’s Network, Bangalore.
6. 11 students were placed in Vee Technologies, Hyderabad
7. 8 students were placed in Sutherland, Chennai
8. **Mr.K. Venkata Sai** got placed in Inmar, Chennai.
9. **Mr.M. Venkatesh** and **Mr. B. Sai Hemanth** has won I Prize in the event Fuzzy Match in AFOSEC’18 organized by VRSEC on 15th & 16thFeb’18.
10. **Mr.M.Pardha Saradhi** and **Mr. M Bhavani Prakash** has won I Prize in the event Coding Contest in SITAR 2K18 organized by PVPSIT on 9th Feb’18.
11. **Mr.Ganesh Sai A** and **Mr.K Ram Charit Vyas** has won I Prize in the event Technical Quiz in SITAR 2K18 organized by PVPSIT on 9th Feb’18.
12. **Ms..P. Sri Sarvani** and **Ms..Moulika** has won II Prize in the event PPT in AFOSEC’18 organized by VRSEC on 15th & 16th Feb’18.
13. **Mr.Indu** and **Mr.Narayana** has won II Prize in the event Code Hunt in AFOSEC’18 organized by VRSEC on 15th & 16th Feb’18.
14. **Mr.M. Raghu Teja** and **Mr.Ch. Durga Prasad** has won II Prize in the event Fuzzy Match in AFOSEC’18 organized by VRSEC on 15th & 16thFeb’18.
15. 25 students were placed in VERTEX, Chennai
16. 3 students were placed in KJ Systems, Vijayawada.
17. 4 students were placed in SIG, Vijayawada.
18. 2 students were placed in TollPlus India Pvt.Ltd, Bangalore.
19. One student was selected in MAQ Software India Pvt. Ltd.

Internships

1. **Mr.D. Vamsi Krishna** and **Mr.Srivatsav** has got internship in WOIR Software India Pvt.Ltd.
2. **Mr. Dhavala Akhil** has got internship in Zoho Corporation Private Limited Estancia IT Park, Vallancherry Village, Chengalpattu Taluk, Kanchipuram

3. Mr.K. Naveen Chakravarthy and Mr.N.Venkata Sumanth has undergone his internship on Web Designing at PANTECH PROED Pvt. Ltd MG Road, Labbipet, Vijayawada from 10-06-2018 to 17-06-2018.
4. Mr.R. Sumanth, Mr.M Himmanth, Mr.T Manoj, Mr.N Krishna and Mr.V Dhanush has undergone his internship on Android Application Development at HCL Pvt. Ltd Hyderabad from 22- 05-2018 to 23-06-2018
5. Mr.Y. Govardhan Chowdary and Mr.D Yaswanth Reddy has undergone his internship on Internet of Things at Cyber Research Labs & Security Solutions Pvt. Ltd Hyderabad from 14-05-2018 to 14-07-2018
6. Ms.R. Harika has undergone his internship on Railway Signalling and Delphi software at Efftronics Pvt. Ltd Vijayawada from 14 -05-2018 to 23-06-2018.
7. Mr.K.S. Kalyana Raman and Mr.P. Nikhilesh has undergone his internship on Utilizing data passing signals, broadband connections at BSNL Bhavan, Vijayawada from 14-05- 2018 to 15-06-2018.
8. Ms.N. Snigdha has undergone his internship on Block Chain Technology at Innogeeks Vijayawada, from 13-05-2018 to 09-06-2018.
9. Ms.M. Anuhya, Ms.Y Kavya, Ms.M Sravani, Ms.P Sri Sarvani and Ms.P.Pragna has undergone internship on Online Voting System Project at ATOM Software Solutions, Vishakhapatnam from 07-05-2018 to 06-06-2018.
10. Ms.Ch. Kavya Madhuri, Ms.K Prudhvi Bhavana has undergone internship on Web Development at Software Development Center, South Central Railway Women's Welfare Organization, Vijayawada from 01-05-2018 to 01-06-2018
11. Ms.L. Gayatri and Ms.Kavya Sree has undergone internship on Web Development at Software Development Center, South Central Railway Women's Welfare Organization, Vijayawada from 01-05-2018 to 01-06-2018
12. Ms.D. Priyanka has undergone internship on Web Developer at URC INFOTECH Tamilnadu from 01-05-2018 to 31-05-2018
13. Mr.K. Aravind has undergone internship on Speech Recognition at IIIT, Hyderabad, Research University from 26-04-2018 to 26-05-2018
14. Mr.Sai Hemanth .B has undergone internship on Speech Recognition at IIIT, Hyderabad, Research University from 26-04-2018 to 26-05-2018
15. Mr.Ch. Sai Chand, Mr.J. Sai Chaitanya and Mr.P.Manish has undergone internship on Security Analyst at BYODBUZZ ,Rajamundry from 25-04-2018 to 02-06-2018

16. Mr.D. Vinod Kumar, Mr.S.Sai Rohith and Mr.A Anirudh has undergone internship on Balasamiq Tool, UI Design using PHP & HTML at VELSOR OPC Pvt. Ltd Hyderabad from 23- 04-2018 to 24-05-2018

17. Mr.Ch. Sai Chand and Mr.J.Sai Chaitanya has undergone internship on Cyber Security and Ethical Hacking at ECKOVATION Delhi from 25-02-2018 to 18-05-2018

Students' Participation

Three Batches has participated in final round of HACKATHON'18

Batch 1: Dream Aiders –Department of ISRO

- a. A Rachana
- b. A Moulika Devi
- c. B Chaitanya
- d. K Jyothi
- e. K Narayana
- f. K Ganesh Datta



Fig8: Dream Aiders Project at Ahmedabad

Batch 2: Hawk Insights Edits – Department of ISRO

- a. M.S.K.Raghu Teja
- b. J Mani Kumar
- c. D.V.S.Madhumita
- d. M.Yaswanth
- e. J.Praveena
- f. K.Bhavana

Batch 3: Code_Infinito – Ministry of Electronics

- a. B.Lakshmi Madhuri
- b. G.J.K.N.S.Avinash
- c. B.Lakshmi Prasana
- d. D.Lakshmi Priyanka
- e. A.Manideep
- f. B.V.Prudivi Kumar

Internet of Things

What is the Internet of Things?

The Internet of Things, or IoT, refers to the billions of physical devices around the world that are now connected to the internet, collecting and sharing data. It's possible to turn anything, from a pill to an aero plane to a self-driving car into part of the IoT. This adds a level of digital intelligence to devices that are dumb, enabling them to communicate real-time data without a human being involved, effectively merging the digital and physical worlds.

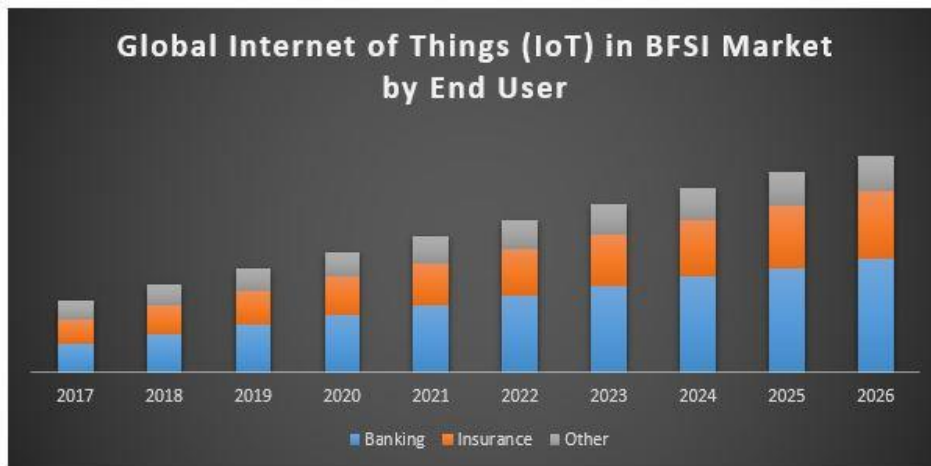
The term IoT is mainly used for devices that wouldn't usually be generally expected to have an internet connection, and that can communicate with the network independently of human action. So, a PC generally considered an IoT device and neither is a smart phone. A smart watch fitness band or other wearable device might be counted as an IoT device, however.



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or a

How big is the Internet of Things?

Big and getting bigger -- there are already more connected things than people in the world. Analyst Gartner calculates that around 8.4 billion IoT devices were in use in 2017, upto 31 percent from 2016, and this will likely reach 20.4 billion by 2020.



What are the benefits of the Internet of Things for consumers?

- The IoT promises to make our environment -- our homes and offices and vehicles -- smarter, more measurable, and chattier.
- Smart speakers like Amazon's Echo and Google Home make it easier to play music, set timers, or get information.
- Home security systems make it easier to monitor what's going on inside and outside, or to see and talk to visitors.
- Meanwhile, smart thermostats can help us heat our homes before we arrive back, and smart light bulbs can make it look like we're home even when we're out.

What about Internet of Things security?

Security is one the biggest issues with the IoT. These sensors are collecting in many cases extremely sensitive data -- what you say and do in your own home. So far the IoT's security track record has been extremely poor. Too many IoT devices give little thought to basics of security, like encrypting data in transit and at rest.

Hacking into devices can have dangerous real-world consequences.









What about privacy and the Internet of Things?

And it's worth remembering that IoT data can be combined with other bits of data to create a surprisingly detailed picture of you.

❖ In one project, a researcher found that by analyzing data charting just the home's energy consumption, carbon monoxide and carbon dioxide levels, temperature, and humidity throughout the day they could work out what someone was having for dinner.

Future of IOT

As the number of connected devices continues to raise, our living and working environments will become filled with smart products -- assuming we are willing to accept the security and privacy trade-offs. Some will welcome the new era of smart things. Others will pine for the days when a chair was simply a chair.

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|--|---|---|--|
| <p>Transport & Logistics</p>  <p>Fleet management, Goods tracking</p> | <p>Utilities</p>  <p>Smart metering, Smart grid management</p> | <p>Smart cities</p>  <p>Parking sensors, Waste management, etc.</p> | <p>Smart building</p>  <p>Smoke detector, Home automation</p> |
| <p>Consumers</p>  <p>Wearables Kids/senior tracker</p> | <p>Industrial</p>  <p>Process monitoring & control, Maintenance monitoring</p> | <p>Environment</p>  <p>Food monitoring/alerts, Environmental monitoring</p> | <p>Agriculture</p>  <p>Climate/agriculture monitoring, Livestock tracking</p> |

--By T.Manoj

Turing Award Winners for 2017:

For their foundational contributions to today's
Microprocessors helped usher in Mobile and IoT Revolutions

David A. Patterson

John L. Hennessy



David A. Patterson

BIRTH

16 November 1947, Evergreen Park, Illinois, United States

EXPERIENCE

Patterson is an American computer pioneer and academic who has held the position of Professor of Computer Science at the University of California, Berkeley since 1976. He announced retirement in 2016 after serving nearly forty years and became a distinguished engineer at Google. He currently is Vice Chair of the Board of Directors of the RISC-V Foundation and the Pardee Professor of Computer Science, Emeritus at UC Berkeley.

AWARDS AND HONORS

Eckert-Mauchly Award, IEEE John von Neumann Medal, Turing Award, ACM Fellow, ACM Distinguished Service Award

John L. Hennessy

BIRTH

22 September 1952, Hunting town, New York.

EXPERIENCE

Hennessy is an American computer scientist, academician, businessman and Chairman of Alphabet Inc. Hennessy is one of the founders of MIPS Computer Systems Inc. as well as Atheros and served as the tenth President of Stanford University.

AWARDS AND HONORS

IEEE Medal of Honor, Turing Award, ACM Fellow, Computer History Museum Fellow