



VISITING CHAIR PROFESSORSHIP  
IN DEPARTMENT OF CSE



CELEBRATING  
**GENEROSITY**  
Dr. VENKY HARINARAYAN



ENTREPRENEURSHIP FUND

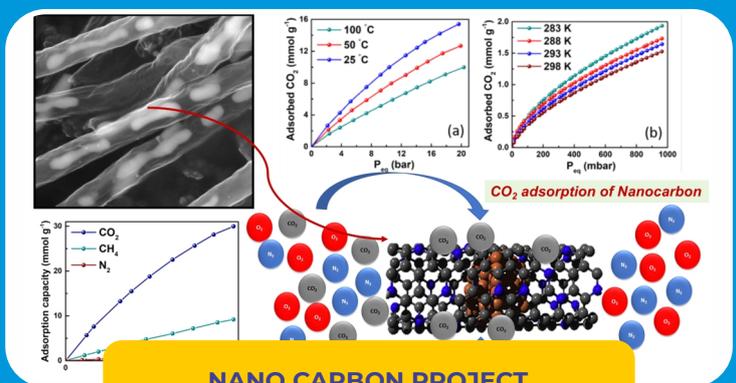


INSTITUTE CHAIR PROFESSORSHIP  
IN DEPARTMENT OF CSE



1988 BATCH PEARL  
REUNION FUND

INDIAN INSTITUTE OF TECHNOLOGY MADRAS  
OFFICE OF ALUMNI AND CORPORATE RELATIONS



NANO CARBON PROJECT



**Prof. BHASKAR RAMAMURTHI**  
Director, IITM

“

IITs offer a fantastic environment to learn, not only from teachers but also from each other. Every IIT student must use the 4 or 5 years here to the utmost to transform him or herself. Our experience shows that alumni who use the opportunity provided here well, go on to shine in ways we would not even have imagined when they were students.

The institute will continue to focus on fundamental and translational research given the development imperative of the country and find solutions to the pressing problems facing society.

The Venky Harinarayan and Anand Rajaraman Visiting Chairs Program in CSE will have an amplifying effect in our UG, PG and research courses in CSE. The constant flow of prominent people in the emerging fields of Computer Science would expose the students to latest thinking. Thus students, research scholars, and faculty can collaborate with guest faculty and encourage an active two-way flow.

IIT Madras is proud of its global alumni diaspora and well-wishers, second to none in terms of its accomplishments.

”

## HEARTFELT GRATITUDE TO Dr. VENKY HARINARAYAN FROM IIT MADRAS

“

As we aim to provide continued solutions to global societal problems, it is the support of alumni like you that make it possible. Answers to these challenging enigmas are made feasible through sustainable altruistic contributions from alumni like you.

We thank you for your philanthropic contributions and present to you a report on the impact of your giving. We seek your help and support in our future endeavors to take IIT Madras to the global stage.

”



**Prof. MAHESH PANCHAGNULA**  
Dean, Alumni & Corporate Relations, IITM



# Dr. VENKY HARINARAYAN

1988 - B.TECH - COMPUTER SCIENCE &  
ENGINEERING

Dr. Venky Harinarayan is an entrepreneur and investor. He was one of the founders of Junglee (acquired by Amazon.com), Kosmix (acquired by Walmart Stores, Inc.), founding partner at rocketship.vc and a founding investor in Efficient Frontier (acquired by Adobe). He is a Distinguished Alumnus awardee of IIT Madras in the year 2013.

We are delighted to share the work and impact of the projects made possible at IIT Madras. We rejoice at his generosity towards his alma mater and are grateful to him and his family.

## Dr. VENKY HARINARAYAN RECEIVING DISTINGUISHED ALUMNUS AWARD FROM DIRECTOR OF IITM





**Prof. C. PANDU RANGAN,**  
VHAR Institute Chair Professor,  
Department of Computer Science &  
Engineering



**Dr. ANAND RAJARAMAN**  
&  
**Dr. VENKY HARINARAYAN**

## **INSTITUTE CHAIR PROFESSORSHIP IN DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

Chair Professorships are awarded to Professors who have distinguished themselves and been recognized by their peers for their research and/or technology development. This award is for a period of 5 years followed by a review and possible extension.

We received generous contributions from several alumni for the Venky Harinarayan and Anand Rajaraman (VHAR) Institute Chair Professorship with significant giving by Dr. Venky Harinarayan and Dr. Anand Rajaraman.

Prof. C. Pandu Rangan, a senior Professor in the Department of Computer Science & Engineering, was awarded the first VHAR Institute Chair Professorship in 2018.

### **Prof. C. Pandu Rangan has received the following awards and honours:**

- Fellow, Indian National Academy of Engineering, (2006).
- Member of the Board of Directors of International Association for Cryptologic Research (IACR), (2002-2005).
- Member, Board of Directors, Society for Electronics Transaction and Security (SETS), (2005-2007).
- Member, Editorial Board, Lecture Notes in Computer Science Series (LNCS Series), Springer-Verlag, Germany, (2005-2008).
- Member, Editorial Board, Journal of Parallel and Distributed Computing, (2005-2008).

The **detailed report** encapsulates the activities on blockchain technology spearheaded by Prof. C. Pandu Rangan.

# 1988 BATCH PEARL REUNION FUND

In Dec 2018, the Class of 1988 gathered at IIT Madras for their pearl reunion and unanimously decided to contribute the reunion fund to the following causes:

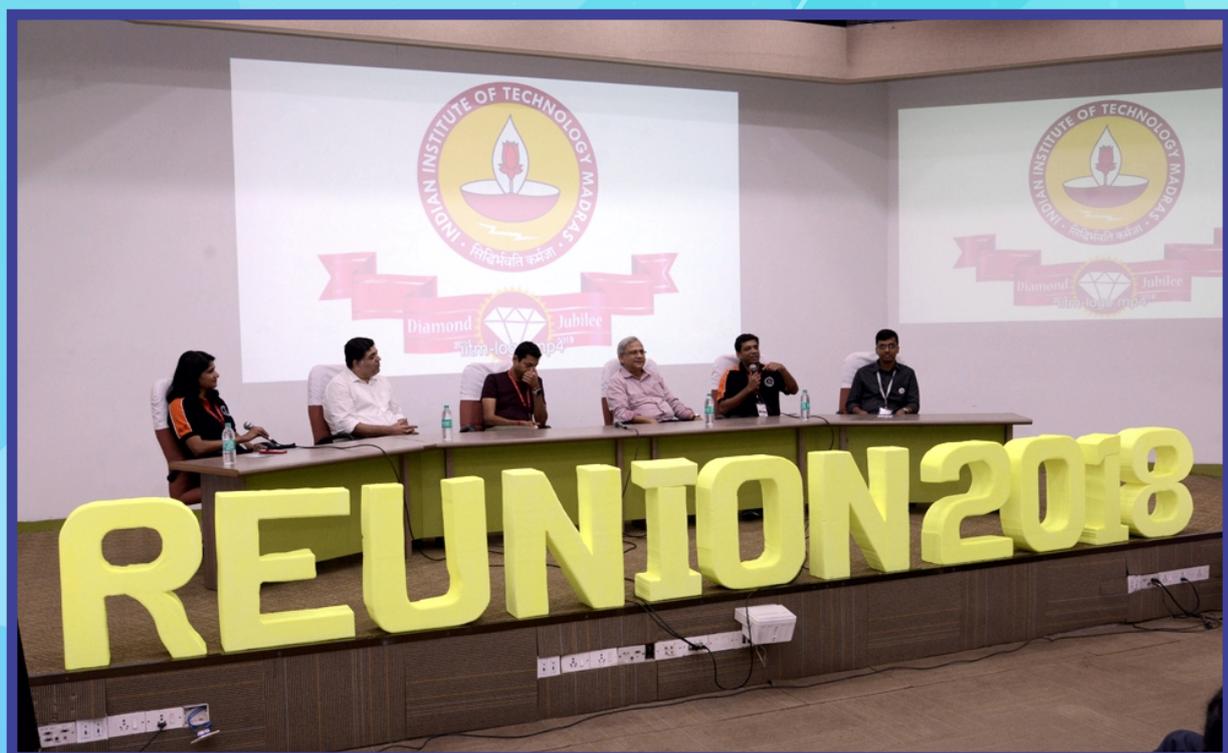
## **Alumni Endowment Fund**

The purpose of the Alumni Endowment is to use the annual interest accruals to fund initiatives that will have a key transformational impact on the Institute and keep it as a world-class institution of technological advancement. Every year, the Director issues instructions on disbursements to be made from the fund. The selection of projects, for which the money was raised, should be in line with the following: Key transformational initiatives, where the results are not proven or have uncertain outcomes, and hence do not get funded from the regular government funds.

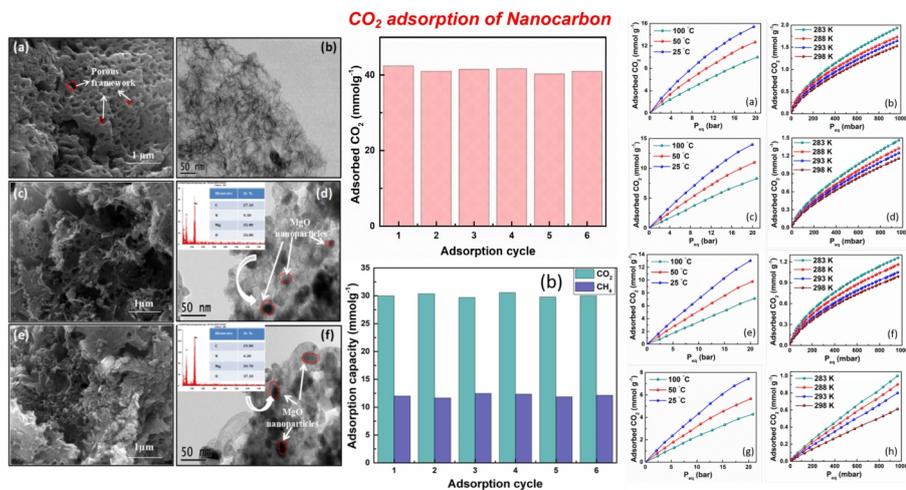
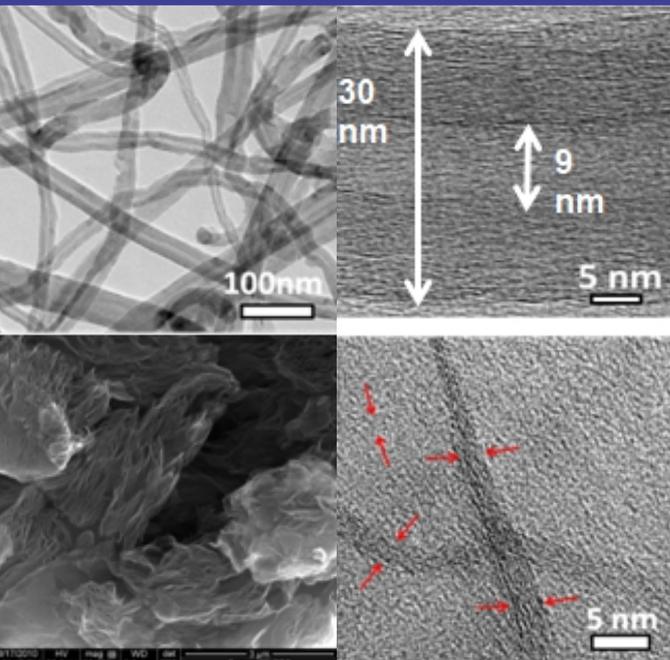
[CLICK HERE FOR THE DETAILED REPORT](#)

## **Nanocarbon Project**

The nanocarbon project was aimed at developing an efficient, cost-effective carbon dioxide adsorbent media using different carbon nanostructures (carbon nanotubes and graphene) and metal/metal oxide nanoparticles. (Details in page 7).



# NANOCARBON PROJECT



## MICROSCOPE IMAGES OF MWNTS AND GRAPHENE (NANOCARBON):

The rising concentration of CO<sub>2</sub> in the atmosphere is linked with global climate change. Since the time of the industrial revolution, the atmospheric CO<sub>2</sub> concentration has risen by about 35% to a value of 380 ppm and it is projected to continue to rise if anthropogenic sources remain unchecked.

Fossil-fuel burning power plants are the single-largest anthropogenic emission sources globally, accounting for approximately one-third of CO<sub>2</sub> emissions. Of the fossil-fuel plants, for a fixed amount of fuel feed, coal fired plants emit significantly more CO<sub>2</sub> than natural gas plants.

In addition, cement industries also contribute for increasing concentration of CO<sub>2</sub> in our environment.

Thus, by finding the appropriate CO<sub>2</sub> adsorbent, we can reduce the increasing problem of global warming.

The present project therefore was aimed at developing an efficient, cost effective carbon dioxide adsorbent media using different carbon nanostructures (carbon nanotubes and graphene) and metal/metal oxide nanoparticles.

This also included the large-scale production of CO<sub>2</sub> adsorbent for their direct use in industrial exhaust.

[FOR A DETAILED REPORT ON THIS PROJECT CLICK HERE](#)

# VISITING CHAIR PROFESSORSHIP IN DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



## Prof. David Peleg

The Norman D. Cohen Professorial Chair of Computer Science, Weizmann Institute of Science, Israel.

**Research Interests:** Algorithms (particularly graph algorithms and approximation algorithms for NP-hard problems), Distributed computing (algorithms, lower bounds, fault tolerance), Communication networks (protocols, communication primitives, complexity issues).

### Major Publications (while at IITM):

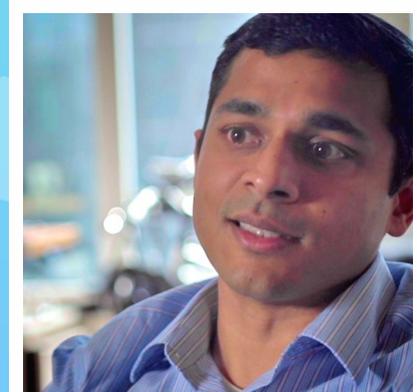
- ▶ [Distributed Graph Realizations](#)

Authors: John Augustine, Keerti Choudhary, Avi Cohen, David Peleg, Sumathi S, Suman Sourav.

Prof. David Peleg has visited IIT Madras twice. He was here from Feb 17 to Feb 26, 2019 and again from July 28 - Sept 1, 2019.

During the course of his two visits, Prof. Peleg has presented two tutorials, two departmental seminars, and one institute colloquium. He also interacted on a one-on-one basis with several IIT Madras affiliates (both faculty and students). Going beyond IIT Madras, he also reached out to the theoretical computer science group at the Institute of Mathematical Sciences, where he gave a seminar and engaged in research discussions. The Computer Science & Engineering Department looks forward to his interactions in the coming years.

[CLICK HERE FOR THE DETAILED REPORT OF HIS VISIT TO IIT MADRAS](#)



## Prof. Vyas Sekar

Associate Professor in the ECE Department at Carnegie Mellon University.

**Research Interests:** Networking, Security and Systems.

### Major Publications (while at IITM):

- ▶ [Routing for a single interface MCN architecture and pricing schemes for data traffic in multihop cellular networks.](#)

Authors: Vyas Sekar, B. S. Manoj, C. Siva Ram Murthy.

Prof. Vyas Sekar appointment was renewed for a period of three years in December 2019.

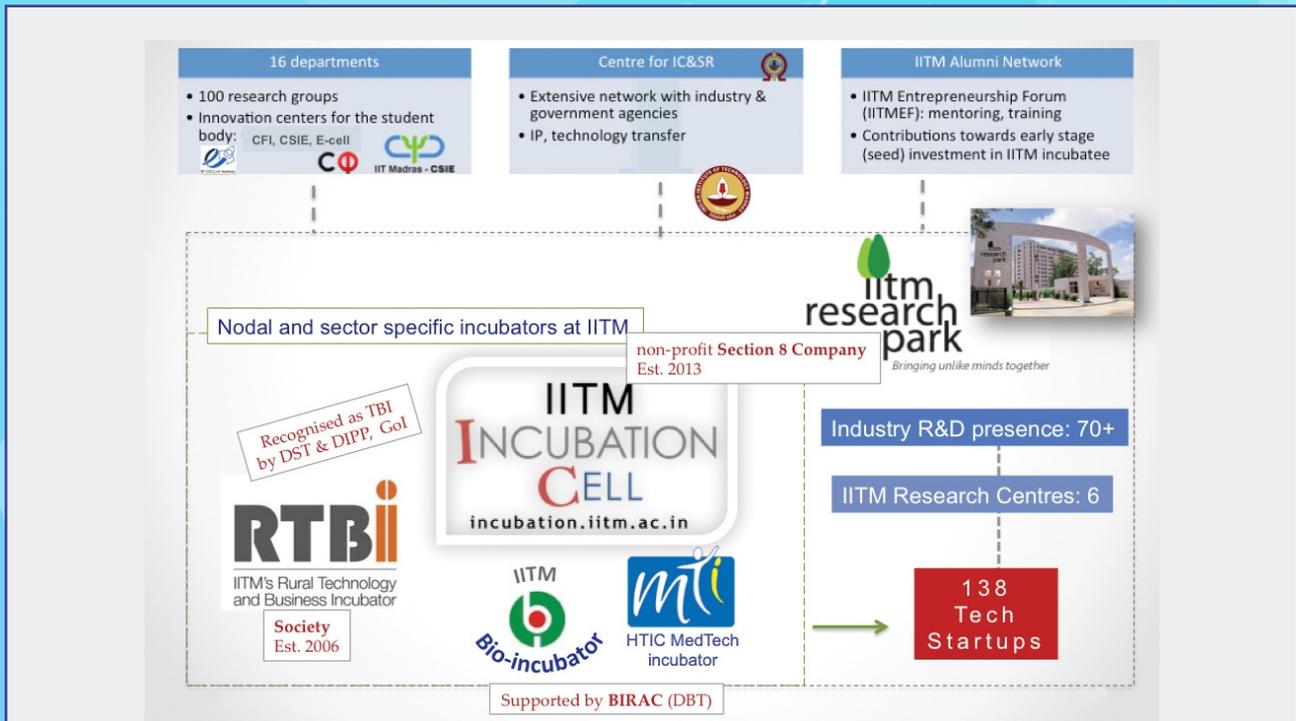
Prof. Vyas Sekar visited IIT Madras during December 23-30, 2019 and March 9-13, 2020.

During these visits, he interacted with students and faculty from CSE and EE Departments. During his 2019 visit, he held a daily paper-reading session with M.Tech students and MS/Ph.D. research scholars (around 10-12) on topics related to "Applications of Neural Nets/Generative Adversarial Networks (GANs) in networking/security/IoT." He also discussed with students regarding their ongoing research projects and provided them with valuable suggestions.

During his 2020 visit, he held a daily discussion session with M.Tech students and MS/Ph.D. research scholars (around 10) in their research areas.

Overall, the visits and interactions have been very beneficial to the students and faculty members.

# ENTREPRENEURSHIP FUND



The IITM Innovation and Entrepreneurship fund is created to fund the different projects and startups supported by the **IITM Incubation Cell (IITMIC)**.

IITMIC is particularly open to proposals with strong social and strategic impact.

[CLICK HERE FOR A DETAILED REPORT OF IITMIC](#)

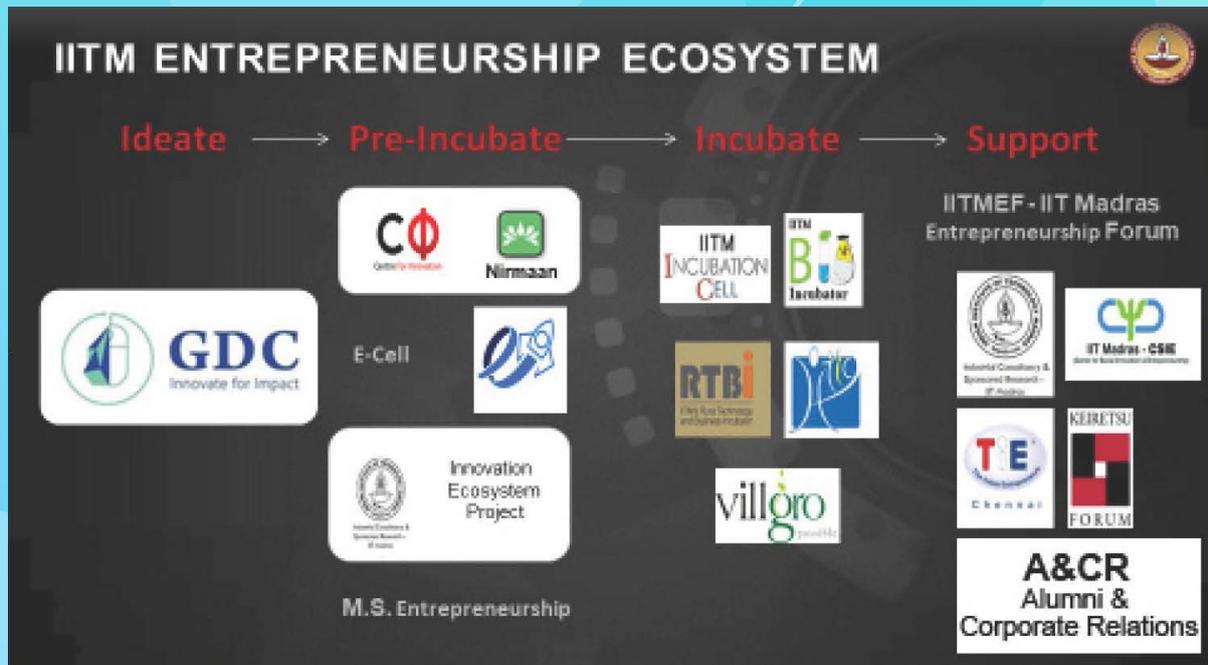
## FUND UTILIZATION BY IITMIC

### OUR WORK IN NUMBERS



**26CR INCUBATOR SEED FUNDING**

# GLIMPSES OF OTHER ENTREPRENEURIAL ACTIVITIES AT IIT MADRAS



IIT Madras has long fostered entrepreneurship, with many campus bodies such as the Centre for Innovation (CFI), Nirmaan (CFI's pre-incubation initiative) and Centre for Social Innovation and Entrepreneurship (CSIE), focusing on innovation and entrepreneurial activities.

We have received contributions from many alumni donors, with a significant giving from Dr. Venky Harinarayan. Let us now see the beneficiary details of those who got seed funding for their start-up through IITM incubation cell.



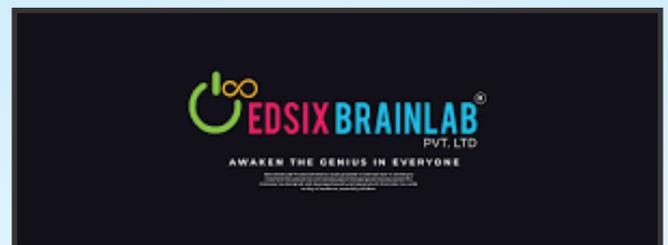
**Greenenvironment , Innovation & Marketing India Pvt Ltd:**  
Smart Water, Air, Energy & Environmental Management Company.

[FOR MORE DETAILS CLICK HERE](#)



The **HyperVerge** Fintech Platform consists of digital KYC+, dedupe fraud check, data verification, credit scoring, and contract verification. With over 280 million customers on boarded in 2019, it's the natural pick for future focussed fintech companies and transformation focussed enterprises.

[FOR MORE DETAILS CLICK HERE](#)



**Edsix Brain Lab Pvt Ltd** is an emerging player in the edutainment industry , It is incubated by IIT Madras Rural Technology Business Incubator (RTBI) and is headquartered in IIT Research Park Chennai. Edsix was born with a vision to create a tool that will enable users experience an enjoyable brain boost regime.

[FOR MORE DETAILS CLICK HERE](#)



Geotagg  
Technologies

**GEOTAGG TECHNOLOGIES PRIVATE LIMITED:**

They work for the maintenance of websites of other firms/ creation of multimedia presentations for other firms etc.

[FOR MORE DETAILS CLICK HERE](#)



**WiiTRONICS**  
Sense more with wireless

**WII TRONICS SOLUTIONS PVT LIMITED:**

Are committed to improving lives by networking. They believe the future lies in the world-wide-web. Their solutions improve the quality of lives by providing relevant data that results in informed decision-making by a common man in his day-to-day activities. They were supported twice by Dr. Venky Harinarayan funding.

[FOR MORE DETAILS CLICK HERE](#)

**THIN FILM SOLUTIONS - CONSULTANTS AND PROJECT EXECUTORS PVT. LTD.:**

Manufacture of fabricated metal products; metal working service activities.

[FOR MORE DETAILS CLICK HERE](#)

**TARA TECH SOLUTIONS PRIVATE LIMITED:**

Not Active



GUVI

**GUVI GEEK NETWORK PVT. LTD.:**

They focus on pedagogical tools which is least focused by skilling industry. They are excited to simplify skilling for every learner through their platform, mentors and community. Their mission is to make skilling easy and tireless process.

[FOR MORE DETAILS CLICK HERE](#)



**i2i SOFTWARE SOLUTIONS**

**i2i TECHNOLOGY SOLUTIONS PVT. LTD.:**

This company works towards the seamless assimilation of striking web applications, fresh contents and successful web promotion strategies to get business highest visibility in the online world.

[FOR MORE DETAILS CLICK HERE](#)



Technology of Touch  
Committed to "Make in India"

**MERKEL HAPTIC SYSTEMS TOUCHING LIVES... VIRTUALLY:**

Design and development of hardware and software for healthcare simulators using advanced virtual reality systems along with haptic feedback technology for training of clinical skills in an immersive environment.

[FOR MORE DETAILS CLICK HERE](#)



**PADMASEETHA TECHNOLOGIES PVT. LTD.:**

Cares about their patients health, in the most affordable and accessible manner, as patients wellbeing is their main priority.

[FOR MORE DETAILS CLICK HERE](#)



**YNOS VENTURE ENGINE CC PVT LTD.:**

The digital platform for start-ups, founders, and investors supported by IIT Madras Incubation Cell. YNOS Venture Engine is a tech platform that helps entrepreneurs understand the competitive landscape of the startups, identify apt investors and obtain expert consultation, using cutting edge technology, data science, and machine learning tools. They have created 10 job opportunities.

[FOR MORE DETAILS CLICK HERE](#)



**NEOMOTION ASSISTIVE SOLUTIONS PVT. LTD.:**

This company is manufacturing high performance, designer, affordable & modular Wheelchairs. The initial products of the company are (a) NeoBolt: a clip-on device to wheelchair to enable the user to go outdoors independently and (b) NeoFly: a wheelchair which is customizable to its user and rugged for outdoor use. They have created 20 job opportunities.

[FOR MORE DETAILS CLICK HERE](#)



**AEROSTROVILOS ENERGY PVT. LTD.:**

This company develops compact 100kW micro gas turbine (MGT) indigenously at an affordable price for Indian market in order to generate power from biomass and bio-waste.

Multi fuel compatibility and continuous operation reliability makes MGT a perfect candidate for distributed power generation in rural India using locally available fuels. Due to its high compactness, a MGT can also be installed in electric vehicles for range extension. They have created 20 job opportunities.

[FOR MORE DETAILS CLICK HERE](#)



**SIRAB TECHNOLOGIES TRANSPORTATION PVT. LTD.:**

This company manufactures transport equipment.

[FOR MORE DETAILS CLICK HERE](#)

**Debriq Creative Labs Pvt. Ltd. (Modulus Housing Solutions)**

Modular foldable houses to reduce mobilization cost & time for Temporary Infrastructures in Construction Industry & oil refineries. "Unbox your space; anywhere, anytime. They have created 10 job opportunities.

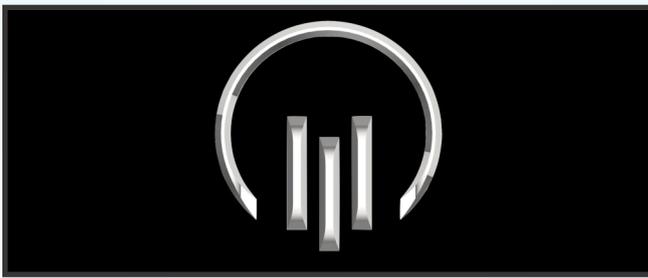
[FOR MORE DETAILS CLICK HERE](#)



#### **SKYRAPTOR INDIA PVT. LTD.:**

Cares about their patients health, in the most affordable and accessible manner, as patients wellbeing is their main priority.

[FOR MORE DETAILS CLICK HERE](#)



#### **OZONE MOTORS PVT. LTD.:**

Developing mobility & transportation systems for the modern colonies on Earth, with an emphasis on clean and eco-friendly product lifecycle and mobility as a service. Founded in the year 2016, Ozone Motors Private Limited is proving its capabilities to become the most trusted Manufacturer firm of next-generation GPS Tracker and Vehicle Tracking System. They have created 5 job opportunities.

[FOR MORE DETAILS CLICK HERE](#)



#### **CRION TECHNOLOGIES PVT.LTD.:**

Crion offers visual based solutions (products & services) for Training, Maintenance and Efficiency of human workforce primarily in manufacturing industries. Company works around the concept of 'augmented workforce'. Technologies leveraged & integrated to provide customized solutions: Mobile/Tablet, Wearables, Virtual Reality, Augmented Reality, Web, Monitors/Projectors. They have created 6 job opportunities.

[FOR MORE DETAILS CLICK HERE](#)



#### **FABHEADS AUTOMATION PVT. LTD.:**

Fabheads specialises in composites part manufacturing sector. Also in tandem, Fabheads focuses a lot of their resources on developing better, more reliable, automated fabrication technologies for the composites sector. Ever since incorporation, Fabheads has went on to become the first company in Asia with in-house developed fibre 3D printing capabilities, **got several awards** for their innovative work in the composites fabrication sector and continue to keep setting themselves newer and bigger targets leading to an eventual complete automation in the composite manufacturing sector.

[FOR MORE DETAILS CLICK HERE](#)

# MEMORIES TO CHERISH THEN AND NOW



Dr. Venky Harinarayan received his B.Tech (CSE) Degree during the 25th Convocation at IIT Madras in the year 1988.



Rajat Vadiraj Dwaraknath received his B.Tech (EE) Degree during the 57th Convocation at IIT Madras in the year 2020. Appearing 'in person' during the mixed-reality event.

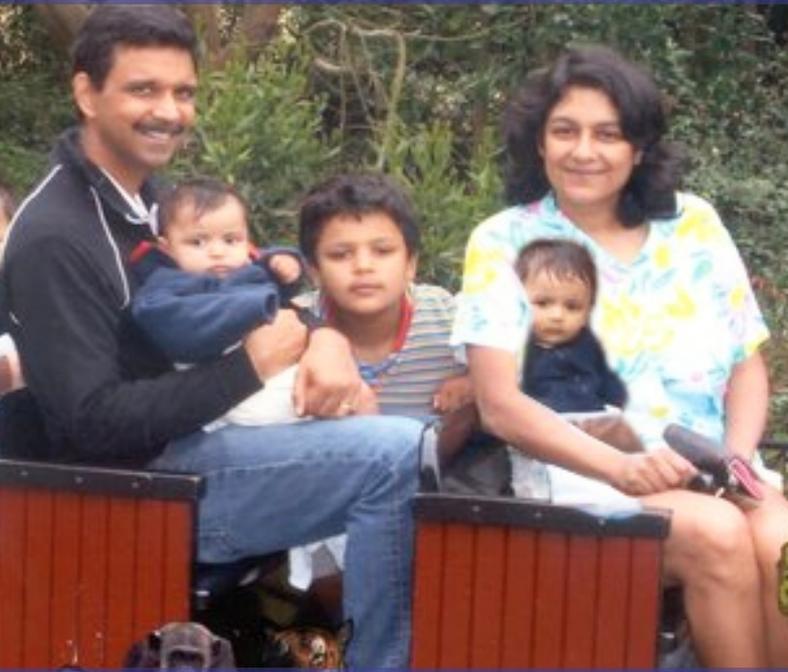


Four Jungles met after 20 years

# WE ARE GRATEFUL TO YOU, Dr. VENKY HARINARAYAN AND Mrs. SUDHA K NEELAKANTAN!

Thank you for your generosity to IIT Madras over the years. Because of contributors like you, our students and professors can dream big and work towards a better, brighter future. We hope you are proud of your alma mater and how it has continued to develop since your time here. You and your family have been instrumental in fertilizing this significant growth.

We will continue to strive to nurture the culture of academic excellence that is the hallmark of IIT Madras—quality education, cutting-edge research, and unfettered creativity. We are proud to have you and your family walking with us along this trail. Wish you and your family the best always!



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For more information, please contact:  
**Office of Alumni and Corporate Relations**  
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