



Indian Institute of Technology Madras  
Office of Alumni and Corporate Relations



CELEBRATING GENEROSITY

Mr. Kumar Swaminathan



Message from the Director

## Prof. KAMAKOTI VEEZHINATHAN

Director, IITM

IIT Madras, in the 63 glorious years of its journey, has been scaling new heights of success and excellence. This is reflected in many ways, including in its exemplary performance for six years in a row, on the National Institute Ranking Framework released by the Ministry of Education, Government of India. Chosen as one of the Institutes of Excellence, IIT Madras has established a number of Research Initiatives in various fields of contemporary relevance showcasing the commitment towards fostering world-class research. In this continuing pursuit of academic and research excellence, we will continue to embrace innovative practices while promoting efficient and effective governance through AI-driven hyper-automation.



The outpouring of generous support we have received in the past year from well-wishers such as yourself has been humbling. On behalf of the Institute, I offer you our deepest gratitude for keeping IIT Madras strong. I am confident that we will continue to make many positive strides and leaps forward with renewed vigor to achieve the goals that we have set out for us. Together, with your support, we are confident of creating an IIT Madras with a diverse group of faculty and staff pursuing nationally relevant and globally recognized research. If this past year has taught us anything, it's that it takes a dedicated and committed community to keep us moving forward — and far beyond. Thank you!

Message from the Dean

## Prof. MAHESH PANCHAGNULA

Dean, Alumni & Corporate Relations, IITM



“Heart felt gratitude to Mr. Kumar Swaminathan from IIT Madras”.

“Our aim to provide continued solutions to social problems on a global scale is realized through the sustained support of alumnus such as you. We thank you for your contribution as we present a report of its impact. We hope to receive your help and support for our future endeavors to take IIT Madras to the global stage.”

## Mr. KUMAR SWAMINATHAN

B.Tech, Electronics – Batch 1981

Mr. Kumar Swaminathan is a prestigious alumnus of IIT Madras. He completed his B.Tech in Electronics (Batch of 1981). He is a researcher, developer, and a manager in the areas like multi-media signal processing, transport & networking involving algorithm, firmware, and software development. He pursued his Master's and Doctorate in Electrical Engineering at Caltech, California, US and holds a large number of publications, patents, and standards participation. Mr. Kumar has been generous in his contributions over the years to the various developmental activities at IIT Madras.



### YOUR JOURNEY FROM IIT MADRAS

#### Education



Indian Institute of Technology, Madras

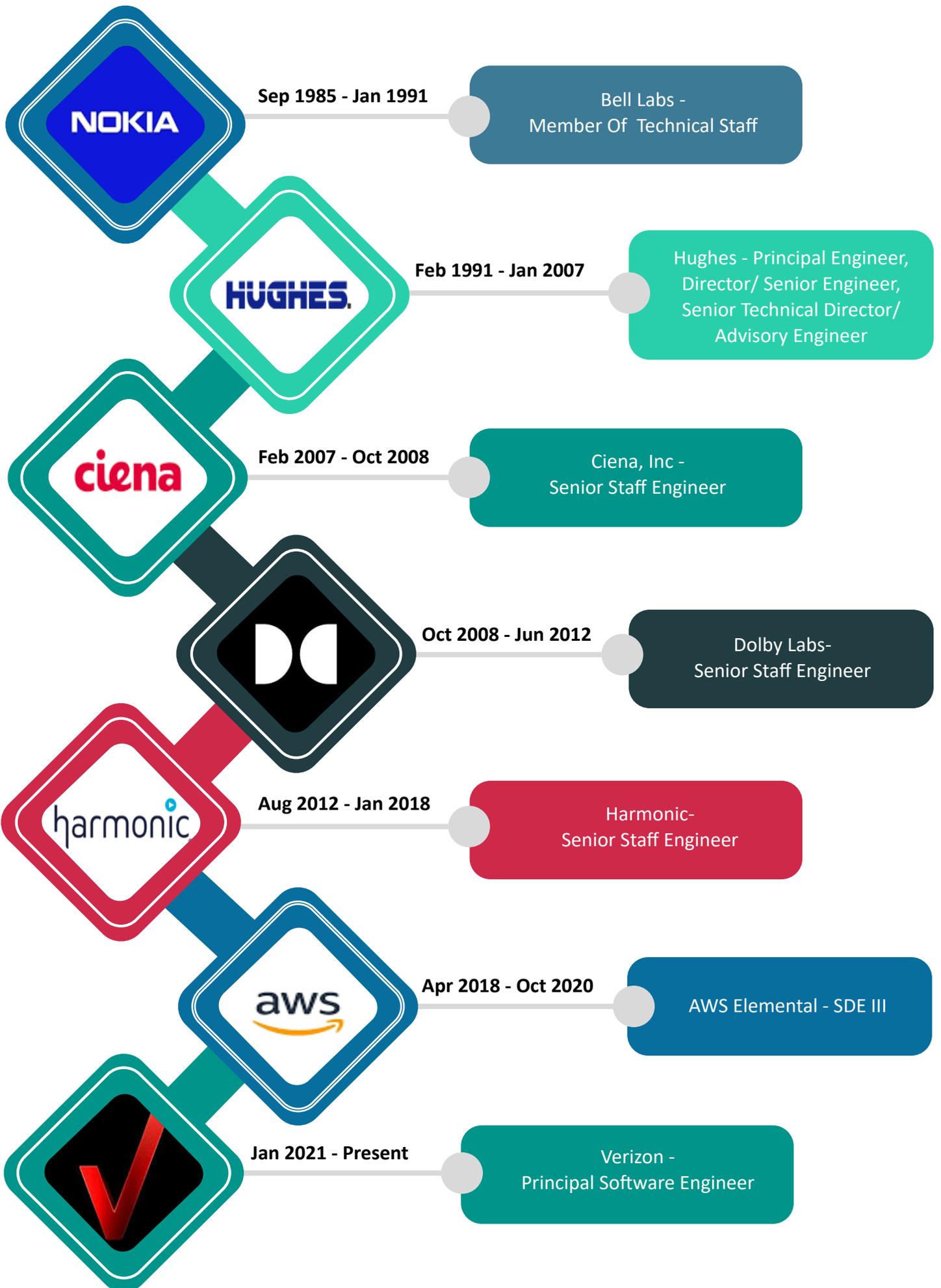
B.Tech, Electronics 1976 - 1981



Caltech

Master's and Ph.D, Electrical Engineering

1981-1986



## CHENNAI FLOODS, 2015

The 2015 South India floods resulted from a heavy rainfall generated by the annual Northeast Monsoon in November–December 2015. It profoundly affected the Coromandel Coast of South India. More than 500 people were killed, and over 1.8 million (18 lakh) people were displaced in Tamil Nadu and Andhra Pradesh. It was one of the most expensive natural disasters of the year.

IIT Madras had extensively contributed to the relief and rehabilitation of the Chennai Flood Victims through campus collection drives, distribution of dry ration and medicines to about 30 households per day. The IITM's Reverse Osmosis plant was also used to filter 5000 liters of water and it was distributed to many residents in Taramani with the help of campus volunteers. For a detailed report on the covid relief activities by IIT Madras, kindly [click here](#)



## 1981 BATCH PROJECT - MODERNIZATION OF CFI

The Centre for Innovation (CFI) is a 'Student's Lab' at IIT Madras, set up in 2008 with funds donated by the 1981 Batch's Silver reunion. "Walk in with an idea, walk out with the product" is the motto of CFI. Students spend their quality time at CFI and it has created many successful entrepreneurs. A great workspace, comprehensive inventory, ample faculty and senior student's guidance, makes CFI a gifted asset for IIT Madras students.

CFI is about 10 years old and requires modernization to keep up the pace with evolving opportunities. The 1981, 1991 & 1992 batches have extended their support for this initiative. The current progress of the construction is as follows.

- All footings are completed
- All columns are reached up to the plinth level
- Plinth beam works are completed
- 80% of the grade slab works are completed
- 50% of the ground floor column raising work is completed
- Mockup RCC wall is in progress
- South side staircase works are in progress
- Lift pit is constructed up to the ground floor roof slab level

### CFI- Proposed



### CFI - Previously



### CFI - Floor Wall Concrete work in progress



We have received excellent support towards Alumni Community Chair Professorship. We are deeply grateful for the generous contributions of various Alumni and Non-Alumni Donors, with significant contributions from Mr. Kumar Swaminathan. This report encapsulates and foregrounds the initiatives that have been taken up in conjunction with the Chair Professorship by Prof. R. Nagarajan.

## Research Priorities:

- Coal beneficiation using ultrasonic fields.
- Usage of Nano emulsions of plant oils for cancer treatment.
- Dust-repellent surfaces and coatings for building exteriors.
- **Doctoral research:** One Ph.D. thesis defended in Jan 2020 (Dr. Srivalli Hariharan); Two Ph.D.'s currently co-guided with Prof. T Pradeep on an industry-relevant project, and one External Ph.D. from CSIR under solo guidance.
- **Post-Doctoral Research:** Three post-doctoral Fellows are currently being mentored.



Prof. R Nagarajan and his team of scientists, Dr. M. Joyce Nirmala, Mrs. Latha Durai and Mr. Vineet Gopakumar developed formulation using clove oil to combat cancer.



They have developed a nano-scale emulsion of clove bud essential oil using a technique with potent anticancer and antibacterial activity.



Dr. Srivalli Hariharan  
A comparative study to understand the effect of solvents, particle size, and their role in the de-alkalization of coal was carried out.



Keep It Flowing is a campaign by our institute to seek contributions from IITM Alumni. These benefactions are used to refurbish the hostels at IIT Madras. Twelve out of twenty hostels are old, but the building structure remains strong. As the fitments belong to a different period, it needs face-lifting and maintenance. The funds contributed by the IITM Alumni through Keep It Flowing campaign will be used for the face-lifting and maintenance work of hostels to contemporary standards.

The renovation work for Godavari hostel is scheduled to start in this year. We will keep you posted about the progression of Godavari Hostel's renovation work.

## SWAMINATHAN FAMILY - MERIT CUM MEANS SCHOLARSHIP

The Merit-Cum-Means Scholarship fully supported the cost of tuition fees which was Rs. 90,000/- per annum for a student until 2015. From 2016, the tuition fee has been revised to Rs.2 lakhs per annum. The Govt. Merit-Cum- Means Scholarship has been revised to 2/3rd of Rs.2 lakhs (i.e. 1.33 Lakhs). This leaves a sum of Rs. 66,667/-, which is supported by the contributors.



**Rohan Benny, ED20B051**  
Dual Degree - Engineering Design  
Class of 2020 – 2025  
CGPA Range – 8 to 9

“I wanted to express my thanks for choosing me to be a recipient of the prestigious MCM scholarship. It will greatly aid me in continuing my studies at IIT Madras. From the bottom of my heart, I once again thank you for this opportunity. I promise not to squander this opportunity that has been graciously given and will strive forward to excel in my studies”.

**- ROHAN BENNY**

“I express my sincere gratitude to you for offering me the MCM Scholarship and I am extremely grateful for the noble contribution. I PROMISE to work hard and I thank you for easing my family’s financial burden.”

**- A SUDHAN**



**A Sudhan, CH20B104**  
B.Tech - Chemical Engineering  
Class of 2020 – 2024  
CGPA Range – 8 to 9

## Bestowal of IIT Madras

The second wave of COVID-19 in India has struck close to many of us, people lost their lives due to lack of oxygen. In these testing times, our IIT Madras Alumni have come together and contributed to a focused fund for breathing aids that can help stabilize people in the crucial hours where care can make a big difference.

The Indian Institute of Technology (IIT) Madras Alumni in India and abroad have donated more than 2 million USD towards COVID relief efforts in India. IIT Madras is coordinating and using a phased approach for deployment to ensure a high impact of COVID-19 relief. For a detailed report, kindly [click here](#)



Prof. Bhaskar Ramamurthi, former Director, IIT Madras, handed over 200 oxygen concentrators purchased with the aid of the alumni contributions to Gagandeep Singh Bedi IAS, Commissioner, Chennai Corporation



Dr. Jane Prasad, Registrar, IIT Madras, handed over 74 BiPAP Units to Chennai Corporation Officials recently.



IIT Madras has contributed 1000 units of COVID19 medicines to Sri Venkateswara Institute of Medical Science (SVIMS), Chittoor



IIT Madras in coordination with IITM Alumni Association has contributed 200 oxygen concentrators (10 litre capacity) to Government of Karnataka

# UPGRADATION OF MEDICAL INFRASTRUCTURE

IIT Madras Hospital was established in 1969, has ensured the safe health of the institute's employees, students, and campus residents. The hospital has full time doctors, part-time consultants, nurse helpers, and administrative staff. The hospital has been accredited with ISO 9001:2015 acknowledging the clinical excellence, providing holistic care, and ensuring evidence-based medicine.

If there is anything that the covid-19 pandemic has taught us last year, it is the significance of having an efficient health care infrastructure system in place. Keeping this in mind, we are proposing to upgrade our current institute hospital facilities to be equipped for unprecedented times.

The aim of the institute is to enhance & expand various facilities such as:

- Construction of an additional floor above the front wing of Institute Hospital.
- Face lifting and painting work on the existing floor
- Re-locating Pharmacy and Testing labs
- An improved & well-equipped emergency room, casualty & ambulance service for quick response in case of emergencies; expanded pharmacy with an adequate inventory of preventive & corrective medication
- Upgradation of the gynecology department & the physiotherapy department for the benefit of patients in need
- Advanced diagnostic facilities
- 24/7 Covid care – procure oxygen concentrators, sanitization stations in various parts of the campus, ventilators, PPE, and trained medical personnel.

The project will begin once the contributions reach the required budget.



Face-Lifting Work – Doctor consulting rooms



Toilet Renovation



The work for 1981 Batch- Ruby reunion is yet to be decided, we will keep you informed as and when it progresses.

# THANK YOU FOR YOUR SUPPORT!



Thank you for your sustained generosity to IIT Madras over the years. Contributors such as yourself enable our students and professors to dream big and work towards a better and brighter future.

We hope you are proud of your relations with IIT Madras and how it has remained steadfastly committed to academic and research excellence since the time of your connection. You and your family have been instrumental in facilitating this significant growth.

Our efforts to nurture the culture of academic excellence that is the hallmark of IIT Madras - quality education, cutting-edge research, and unfettered creativity shall continue. We are privileged and humbled to have you and your family walking with us along this trail. We wish you and your family the best always in all walks of life!



**Indian Institute of Technology Madras Chennai - 600036**

[www.iitm.ac.in](http://www.iitm.ac.in)

<https://joyofgiving.alumni.iitm.ac.in/>

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