# Celebrating the Generosity of Mr. Induprakas Keri (1992/BT/CS)



INDIAN INSTITUTE OF TECHNOLOGY MADRAS OFFICE OF ALUMNI AND CORPORATE RELATIONS Impact of your Giving in 2023



### Director's Message

#### Prof. Kamakoti Veezhinathan Director, IITM

Greetings!

IIT Madras continues to retain her top position for the eighth consecutive year, in the National Institute Ranking Framework, thanks to the world-class research of its faculty and students. The

contribution and support of Alumni and well-wishers like you has crucially helped this standing and stature. Our achievements in research, education, innovation and entrepreneurship have also earned us the recognition of an 'Institute of Eminence' as well as the top position in the Atal Innovation Ranking from the Government of India.

The institute is making an indelible mark with her 'research with impact' in several areas including quantum computing, drinking water technology, industrially relevant mathematical models for governance, rendering cancer-cure more effective. Our centres of excellence, the Center for Innovation, Nirmaan – the pre-incubator, the Incubation Cell, technology centres such as 'IITM-Pravartak' and others, work in unison for not just our nation's building, but societies world-wide. We aspire to be locally impactful and globally relevant through all these efforts.

Towards exploring new research frontiers, a Department of Medical Sciences and Technology has been launched to conjoin medicine and engineering. Similarly, a School of Sustainability is on the horizon to research sustainable practices in the Global South. The campus is moving towards 'carbon-net-zero' goal through water conservation by 100% recycling, efficient garbage disposal, and electrification of vehicles. The traditional education system is undergoing a paradigm shift, with our online Bachelor of Science programme in Data Sciences and the National Program of Technology Enhanced Learning, that have won Gold in the 'Lifelong Learning' category and Silver in the 'Best Online Program' category of the Wharton-QS Reimagine Education Awards 2022 respectively. IIT Madras is leading this revolution from the front.

Such achievements are not possible without the deep-rooted faith and support of alumni and wellwishers such as yourself. We are indebted to you for your generous, bountiful, and impactful contributions. On behalf of IIT Madras, I offer you our deepest gratitude for continuing to strengthen the Institute. Together with your support, we are confident of building an IIT Madras that is more inclusive, diverse, and enabled by an ecosystem to be nationally relevant and globally recognised. Thank you!

### Dean's Message

Prof. Mahesh Panchagnula Dean, Alumni & Corporate Relations, IITM



Greetings!

I express my heartfelt gratitude to you for your generous support to IIT Madras. We appreciate your passion in supporting the causes you do and I assure you that your contributions will be optimally utilised. This report has been compiled to convey how your largesse has touched lives and made a difference at IIT Madras. In keeping with the rapid, contemporary strides in science, technology we have set ambitious goals for ourselves - your continued enthusiasm and support will help us greatly in these endeavours.

IIT Madras is far more diverse in its set of pursuits, more green and more research-focused. And yet, it remains unchanged over these years, it is still the best Institute in the country, and attracts the best students that India has to offer to come and make a mark. I also cordially invite you to visit your campus to see for yourself, the impact of your contribution, and the growth and transformation the Institute has undergone over the years.

We can never express our gratitude enough for all that you have done - Thank You !

"GIVING IS NOT JUST ABOUT MAKING A DONATION -IT'S ABOUT MAKING A DIFFERENCE"

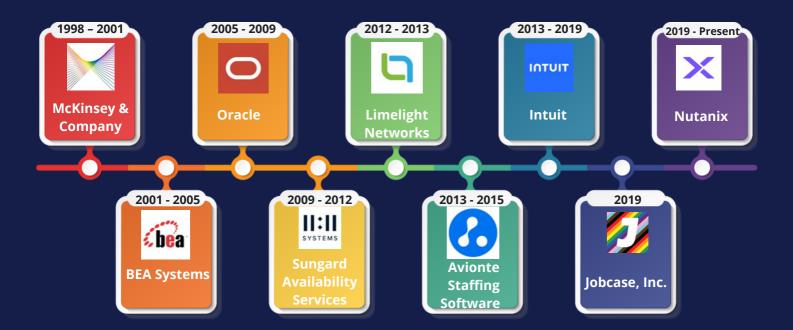


## Mr. Induprakas Keri (1992/BT/CS)

Induprakas Keri is SVP Nutanix Cloud Infrastructure (NCI), Nutanix Cloud Clusters (NC2), and Chief Product Security Officer (CPSO). In these roles, Indu oversees Nutanix's industry-leading hybrid cloud infrastructure for both on-premises and public cloud deployments. In addition to leading the NCI/NC2 engineering teams, Indu leads the company's product security efforts.

As a long-time C-level executive, Indu has served as Chief Operating Officer at Limelight Networks, CTO at SunGard and CISO at Intuit. Currently, he is also a visiting scholar at MIT where he works on FinTech and Space. Indu started off his career as an engineer at Silicon Graphics (SGI) where he implemented his dissertation work into the high-end parallelizing compiler delivered by SGI. His other work experience includes stints at McKinsey & Company, BEA Systems and Oracle.

He has a PhD in Computer Science from Cornell.



## Summary of your contribution to IIT Madras

2021

## Veena and Induprakas Keri Faculty Fellowship

## Veena and Induprakas Keri Faculty Fellowship



Akanksha Agrawal Assistant Professor

#### **Broad Area of Research:**



Parameterized Complexity & Algorithms



Approximation Algorithms



Graph Algorithms



**Computational Geometry** 



Exact Algorithms

Dr. Akanksha Agrawal is an Assistant Professor at the Dept. of Computer Science & Engineering, Indian Institute of Technology Madras. Before moving to Chennai, she was a postdoctoral researcher at Ben-Gurion University of the Negev, Israel and was funded by PBC Fellowship, and at Hungarian Academy of Sciences, Hungary. She obtained her Ph.D. from the University of Bergen, Norway, under the guidance of Prof. Saket Saurabh and Prof. Daniel Lokshtanov.

#### **Current Research:**



We have resolved two central open problems in the field of Parameterized Algorithm, namely, existence of kernel for Chordal Vertex Deletion and Interval Vertex Deletion.



Demonstrated how modern conjectures like Gap-Exponential Time Hypothesis can be used to give very simple algorithmic lower bound results



I am currently working on expanding the traditional Parameterized Algorithm in the settings of Approximation Algorithms, and to some extent in Distributed Algorithms.

#### Students contributions (who were involved in Research):

Although I do not have M.S. or Ph.D. students, I have published results with the following B.Tech. students under my guidance (co-guided projects not included



Soumita Hait (IIT Kharagpur), ISAAC 2022

Ravi Kiran Allumalla and Varun Teja Dhanekula (IITM), IPEC 2021

#### **Honours, Awards & Affiliations**

- Associate Editor for the journal, Acta Informatica
- Invited speaker at the workshop, Recent Trends in Algorithms 2023
- Program committee member for conferences: MFCS 2023, IPEC 2023, FCT 2023, STACS

2022, ESA 2021, IPEC 2021, WG 2021

• SERB Startup Research Grant (SRG/2022/000962)

#### **Plans ahead:**

Combine the power of Parameterized **Algorithms and** Approximation Approximation, with particular focus on graph problems like **Feedback Vertex Set** and Vertex Cover, where substantial progress has been stalled for a decade or more. I would like to explore the threads of **FPT- and Sub-Exponential-Approximations.** 

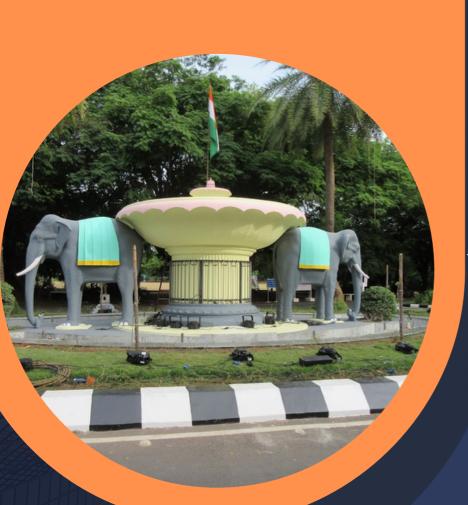
Use the power of newer conjectures from Fine Grained Algorithms & Complexity to develop simple ways to obtain algorithmic lower bound results. Extend the area of Parameterized Algorithms to other computational models like distributed algorithms. Explore the few known yet, till now, unexplored kernelization questions on special graph classes like circular arc graphs.

#### Thank you note from the recipient

I really thank you for this fellowship. Particularly as a young faculty, it helps a lot to have such recognitions.

We still are far away from the required gender diversity in most Indian universities. In the light of this, your efforts towards supporting young women faculties are highly appreciated.

# We are grateful to you & your family



## Mr. Induprakas Keri

Thank you for your sustained generosity Madras IIT over the vears. to *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 Alma mater and how it has remained steadfastly committed to academic and research excellence since your time here. 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 <u>www.iitm.ac.in</u> For more information, please contact: Office of Alumni and Corporate Relations T: +91-44-2257 8390 | <u>acr.iitm.ac.in</u>











June 2023