acm *India Council*

ACM India

Annual Report

of the

ACM India Council

2023-24

TABLE OF CONTENTS

INTRODUCTION

Welcome to another edition of the annual report of ACM-India. Yet again, we had a year full of activities.

Our regular events and grants including summer/winter schools, PhD clinics, Anveshan Setu and ACM-IARCS travel grants continued as before. We had highly talented researchers winning the coveted annual awards including Early Career Researcher (ECR), Outstanding Contributor to Computing Education (OCCE), Outstanding Contribution to Computing by a Woman (OCCW) and Doctoral Dissertation Award (DDA). We were privileged to have last year's Turing Award Winner Dr. Robert Metcalfe and ACM Computing Prize winner Dr. Yael Kalai visiting us and giving plenary talks at our flagship annual event held in February at NISER Bhubaneswar.

We initiated several new events and funding proposals this year. These include

a) a research facilitation grant that covers part of the expenses for students traveling to prestigious invitation only workshops, and/or to cover journal page charges of accepted papers in prestigious journal or conferences,
b) limited funding for chapter activities
c) ROCS (Research Opportunities in Computer Science) initiated last year, to increase awareness of Indian academic and industrial research activities to undergraduate students, picked up speed this year. This one day event was held almost once every other month at various venues.
d) Another new event was Pingala Interactions in Computing (PIC), held a few days before our annual event, at the Infosys Mysore campus. Inspired by the Heidelberg Laureate Forum, PIC had several Indian and international award winners and participants (on invitation) in an informal atmosphere. The event featured several technical talks, panel discussions and interviews with the award winners. PIC also had ACM President Yannis Ioannidis gracing the occasion. Overall the event was well received.

More details about the events by each committee follow in this report. We thank our institutional partners, event sponsors, volunteers, the institutes that organized many of our events and the Council members that made all these possible. We also thank Chitkara University for help in producing this report.

COUNCIL AND COMMITTEE STRUCTURE

Since June 2020, ACM India Council has been organized into multiple committees, each chaired by a council member, focusing on specific functions of the organization or catering to a specific segment of its members. The current council and the office bearers (President, Vice President, Secretary/Treasurer) were elected in June 2022.

The full list of committees, their members and the chairs appear below. In the rest of the report, each of these committees has briefly described their activities in the past year.

ACM India Council

The members of the ACM India Council are listed in the table below. The Council undertakes various activities organized under a set of committees. Each committee is headed by a member and listed after the Council table.

Name	Position	Term of Office
Venkatesh Raman	President	July 1, 2022 - June 30, 2024
Supratik Chakraborty	Vice President	July 1, 2022 - June 30, 2024
Meenakshi D'Souza	Secretary/Treasurer	July 1, 2022 - June 30, 2024
Shweta Agrawal	Council Member	July 1, 2022 - June 30, 2026
Ponnurangam Kumaraguru	Council Member	July 1, 2020 - June 30, 2024
Rajeev Shorey	Council Member	July 1, 2020 - June 30, 2024
Viraj Kumar	Council Member	July 1, 2020 - June 30, 2024
Ranjita Bhagwan	Council Member	July 1, 2022 - June 30, 2026
R. Venkateswaran	Council Member	July 1, 2023 - June 30, 2026
Sachin Lodha	Council Member	July 1, 2022 - June 30, 2026
Sudip Misra	Council Member	July 1, 2020 - June 30, 2024
B. Ravindran	Council Member	July 1, 2022 - June 30, 2024[1]
Yogesh Simmhan	Council Member	July 1, 2022 - June 30, 2026
Rutvi Shah	ACM India-W Chair	July 1, 2023 - June 30, 2025
Jayant Haritsa	Past President	July 1, 2022 - June 30, 2024
Hemant Pande	Executive Director	Ex officio
Chandrashekhar Sahasrabudhe	Chief Operating Officer	Ex officio

Standing Committees

Name	Chair	Term of Office
Executive Committee	Venkatesh Raman	July 2022 - June 2024
Learning Initiatives	Rajeev Shorey	July 2022 - June 2024

[1] B. Ravindran has expressed his inability to continue as a Council member with effect from 1 July 2024, his resignation has been accepted by the President.

Name	Chair	Term of Office
Awards Steering	Ranjita Bhagwan	July 2022 - June 2024
Professional Engagement	Yogesh Simmhan	July 2022 - June 2024
Industry Engagement	B. Ravindran	July 2022 - June 2024
Diversity, Equity and Inclusion	Shweta Agrawal	July 2022 - June 2024
Constitution and Bylaws	Jayant Haritsa	July 2022 - June 2024
Education	Viraj Kumar	July 2022 - June 2024
Research Facilitation	Ponnurangam Kumaraguru	July 2022 - June 2024
Student Engagement	Sachin Lodha	July 2022 - June 2024
Academic Engagement	Sudip Misra	July 2022 - June 2024
Publicity and Membership	Sachin Lodha	July 2022 - June 2024
Computing for Society	Pratik Jain, followed by R. Venkateswaran	July 2022 - June 2024
ACM India-W	Rutvi Shah	July 2023 - June 2025

ACTIVITY HIGHLIGHTS OF ACM INDIA COUNCIL

ACM India Annual Event 2024

The flagship Annual Event 2024 of ACM India Council was hosted by National Institute of Science Education and Research (NISER) in Bhubaneswar on 10th February 2024. As in previous years, the Annual Event was preceded by ACM India ARCS and ACM India-W Annual Summit for Women in Computing on 8th and 9th February 2024.

ACM India Annual Event is a great occasion to celebrate our achievements in computing, and network with representatives of the strong computing community in India as well as eminent international contributors to computing. This year the event featured a fireside chat with ACM Turing Award laureate and "Father of Ethernet'' Robert Metcalfe, hosted by Pravin Bhagwat (Founder 14Trees Foundation). Pravin was also a keynote speaker at the event, and narrated the "Story of 14Trees'', an initiative dedicated to building sustainable, carbon-footprint-neutral ecosystems through reforestation. Shriram Krishnamurthi (SIGSOFT Influential Educator awardee) in his keynote talk described the "Human Factors of Formal Methods." The keynote by Yael Kalai (ACM Computing Prize recipient) focused on "Efficient Verification of Computation on Untrusted Platforms." Another highlight of the event was the award ceremony to felicitate the recipients of ACM Gordon Bell award, ACM Fellow grade and Distinguished Member grade from India, ACM India Doctoral Dissertation Award, Early Career Researcher Award,

Outstanding Contribution to Computing Education Award, Outstanding Contributions to Computing by a Woman Award, and Chapter Awards. We were also privileged to have the ACM President Yannis Ioannidis, CEO Vicki

Hanson, COO Pat Ryan and ACM-W Chair Ruth Lennon attending the event. Yannis outlined the "Goals, Priorities and Initiatives of ACM'', while ACM India President Venkatesh Raman described "ACM India at a Glance."

Diversity, Equity, & Inclusion Focus on ACM India Council

ACM India Council maintains a conscious focus on diversity, equity and inclusion in its initiatives. The individual committee reports that follow have details. The following aspects summarize the approach for this year 2023-24:

● Gender: The entire ACMI-W activity is representative of our gender diversity effort. We have an active ACMI-W committee focused on empowering and enabling women professionals to succeed in their computing careers. ACMI-W engages in gender-sensitive initiatives such as Grad Cohort, ACMI-W Celebration of Women in Computing (AICWiC), Hackathons, Blogathons, Coding/Poster/Idea presentation competition. We ensure gender diversity in our summer/winter school student selection (in addition to one school always reserved for women students), in the India Council and subcommittees, and webinar speakers. ACM India confers an award specifically for "Outstanding Contributions to Computing by a Woman" to honor and celebrate the contributions by women professionals from India. In the few years since their inception, the awards have gone to researchers from industry twice and academia once, which serves as further demonstration of the deserved acknowledgment of applied research carried out by women researchers in industry, where they are underrepresented. We boast as many as 43 ACM India-W chapters across India which promote contributions by women in computing.

● Geography: Geographical diversity and inclusion play a significant role in the events we organize (such as Compute, Annual Event, Academic Research and Careers for Students (ARCS), Chapter Summit, ACM India-W Grad Cohort/AICWiC) by choosing locations across India and ensuring equity among tier 1 / tier 2 cities.

The geographical diversity also features in selecting the 40-50 students chosen from the applications received for the summer/winter schools. Also helping to enhance the geo-diversity of ACM committees, India-based members are now part of many ACM global committees which select worthy recipients for honors or determine computing strategies. To name a few, we now have representation on the Education Advisory Committee (Abhiram Ranade, R Venkatesh), CS202x Committee (Pankaj Jalote), Global Technology Policy Council (P. J. Narayanan), Practitioner Board (Hemant Pande), and Distinguished Speaker Program Committee (Yogesh Simmhan, Madhavan Mukund), ByteCast committee (Mayur Datar), Award Committees (PJ Narayanan and Madhavan Mukund), ACM Books (Meena Mahajan and Sanjiva Prasad), Local Meetup Mentor committee (Sonia Garcha) and last but not the least Diversity Council (Hemangee Kapoor). We continue to proactively suggest suitable candidates from India to key roles in the ACM committees.

● Education: In order to promote aspirational academic institutions to raise their research standards, the Travel Grants Program is updating its policies to provide travel support to students from such institutions to attend and present at premier research conferences. "Teaching Partnership Program", an initiative of ACM India Education Committee since FY '21 fosters inclusivity by improving and positively impacting pedagogy in aspirational academic institutions. Through this program, experts from industry and premier academic institutes partner with aspiring college faculty to teach core or elective courses in the college during their regular course offering. These experts work with the local faculty to give lectures and to provide suggestions on content, delivery, and resources while offering the course through the semester. Like many initiatives, ACM India Council is supporting these programs financially in addition to the human resources.

● Research: In order to enhance the quality of research, PhD clinic is a program through which PhD students (typically from aspirational institutions) are paired with expert mentors in the country for one-on-one consultations. Hundreds of students have benefited from this program. The research facilitation committee has extended this program to have a few selected students spend some time at the mentor's institution for more active immersion. Such students are offered a fellowship by ACM-India under the Anveshan Setu program. This year, we had also invited some of these mentors and mentees to our flagship event for PhD students, Academic Research and Careers for Students (ARCS).

● Conferences organized by ACM India (such as ARCS and Compute) and India SIGs also make special efforts for Diversity and Inclusion. For example, the CODS-COMAD 2022 conference organized by IKDD has included a special track for Diversity and Inclusion. Apart from keynotes, special mentoring sessions are included in this track. Participants from institutions without financial support were provided partial and full financial support for their travel and stay.

● Diversity Council membership: Former ACM India Vice President Hemangee Kapoor continues to be a member of the "ACM Diversity, Equity, and Inclusion (DEI) Council". The ACM DEI Council is focused on enhancing the governance, programs, activities, etc. to drive a more inclusive culture within ACM and the global community we serve. Reflecting the same values on the ACM India front with Hemangee as interface, we are committed to creating an equitable and inclusive environment that respects diversity, welcomes new ideas and perspectives, and where hostility or other antisocial behaviors are not tolerated. To reinforce our commitment to DEI, ACM India has formed a DEI committee starting July FY '23, chaired by Shweta Agrawal, who is a council member of ACM India.

LEARNING INITIATIVES

BASIC INFORMATION

Chair

Chair: Rajeev Shorey
Execom Representative: Hemant Pande
Members: Chitra Babu, Aritra Banik, Sachin Lodha, Sudip Misra, R Venkateswaran, R. Ramanujam

Purpose /Vision of the committee

Information Technology and Computing are evolving at a very rapid pace today. It is almost impossible for any individual, be it in academia or industry, to cope with a plethora of computing technologies and services. There is an explosion of computing technologies all around us and until and unless we continuously enhance our skills to adapt to the current needs of society, we may be left far behind in today's highly competitive world.

Keeping the above challenges in mind, the basic objective of the ACM India Learning Initiatives Committee (LIC) is to ensure that computing professionals from diverse backgrounds are well served with regard to upgrading their knowledge and skill sets. The committee will focus on professional development through organized learning resources for computing practitioners, such as summer/winter schools, workshops, webinars, mini-graphs and bootcamps. We believe this will hugely benefit students, teachers and industry professionals alike. The committee looks forward to working with like-minded individuals and groups in ensuring a very enriching learning ecosystem in the country.

Sub-Committees, if any

Industry & Education Webinars
Chitra Babu, Rajeev Shorey, Hemant Pande

Live Interaction
Rajeev Shorey & Hemant Pande

Industry Bootcamp
R Venkateswaran

Minigraphs
Chair: R. Ramanujam (Jam)
Editorial Board: Yogesh Simmhan, Lipika Dey, Sanjiva Prasad, Sudip Misra

Summer & Winter Schools
Aritra Banik (Chair), Abhijat Vichare, Aswani Kumar Cherukuri, Chandrashekhar Sahasrabudhe, Hemant Pande, Sachin Lodha, Sriparna Saha, Venkatesh Raman

LEARNING INITIATIVES: ACTIVITY HIGHLIGHTS

ACM Minigraphs

Description: ACM India Mini-graphs represent an important initiative intended to bridge the gulf between "too shallow" and "too deep" resources. Specifically, each Minigraph is focused on a contemporary topic and expertly guides the reader from an introductory level to the stage where they can understand the problems in the field and the challenges that need further investigation. A carefully curated set of references point those interested in

additional learning towards authoritative sources for further reading. It is targeted at young practitioners who may take up the area for their career choice.

The status of the Minigraphs that have been completed and that are in the pipeline is as follows.

(i) "From Clouds to Hybrid Clouds", Published in February 2023

(ii) "Beyond Bitcoin: Navigating Blockchain Technology"
   ● TCS Research
   ● In final stage of publication
   ● Likely date of publication is June 2024.

(iii) Proposed minigraph on "Data Science in e-Commerce"
   ● Authors: Mayur Datar and Shourya Roy
   ● Mentor: Lipika Dey

(iv) Proposed Minigraph on "Sustainable Computing"
   ● Krishnasuri Narayanan et al, IBM Research
   ● In pipeline

Industry Webinars
   ● Dr. Rahul Ghosh (Senior Director of Data Science, Walmart Global Tech India) on "AI in Retail @ Walmart Scale", 14th December 2023
   ● Dr. Debdoot Mukherjee, Head of AI, Meesho (1 September 2023)

Education Webinars
   ● **2024**: Pankaj Jalote (Distinguished Professor, IIIT, Delhi) on "Impact of GenAI on Higher Education", 30 January 2024.
   ● **2023**: Vineet N. Balasubramanian (Professor, IIT Hyderabad, India) on "Going Beyond Continual Learning: Towards Organic Lifelong Learning", 29 June 2023.

TCSR-ACM India joint Webinar
   ● ACMI - TCSR joint webinar on "Exploring the Future of Cyber Security" on 19 March 2024. The webinar included a keynote talk on "Optical Cryptanalysis: A Novel Side-Channel Attack" by Prof. Yuval Elovici, Director of the Telekom Innovation Laboratories and Head of Cyber Security Research Center, Ben-Gurion University of the Negev. This was followed by a fireside chat on "Navigating Tomorrow's Cyber Battleground" comprising Prof. Yuval Elovici, Prof. Shweta Agrawal, Computer Science and Engineering department, Indian Institute of Technology, Madras, Kaarthik Sivakumar, Principal Engineer, Cisco and Prof. Sandeep Shukla, Computer Science Department, Indian Institute of Technology, Kanpur. The fireside Chat was moderated by Dr. Sachin Lodha, Chief Scientist, TCS Research.

   ● ACMI - TCSR joint webinar on "GENERATIVE AI – State of the Art and Looking Ahead" was scheduled on 26 July 2023. The webinar included a talk on "Negotiating the Dark Side of Large Language Models: Bias, Jailbreaks and Beyond" by Dr.Monojit Choudhury, Microsoft Research. This was followed by a fireside chat on " Is Generative AI ready for Industry?" comprising Prof. Sunita Sarawagi, IIT Bombay, Prof. C. V. Jawahar, IIIT Hyderabad, Dr. Rahul Ghosh, Senior Director – Data Science, US Omni Tech Walmart- India Development Center, Sankaranarayanan Viswanathan – Industry Advisor, CTO, TCS and V. Ramanathan - Chief Technology Officer, BFSI, TCS. The fireside Chat was moderated by Lipika Dey, Chief Scientist of TCS Research.

ACM India Bootcamp on Responsible Computing

ACM India, in partnership with Kotak-IISc AI Center, Indian Institute of Science (Bengaluru), conducted a "Bootcamp on Responsible Computing" on 13-16 April 2023. The venue was IISc, Bangalore.

The 4-day program was geared towards professionals and senior researchers to get a deep perspective of different aspects of Responsible Computing. Eminent subject matter experts of international repute conducted the sessions and combined it with several hands-on exercises.

Summer & Winter Schools

Members

    a. Aritra Banik(chair)
    b. Aswani Kumar Cherukuri
    c. Sachin Lodha
    d. Hemant Pande
    e. Venkatesh Raman
    f. Sriparna Saha
    g. Chandrashekhar Sahasrabudhe
    h. Abhijat Vichare

Purpose /Vision of the committee

The ACM India Summer School Committee focuses on fostering strong partnerships between industry and academia to develop distinctive summer school programs. Our goal is to create enriching educational experiences that blend theoretical knowledge with real-world applications. By leveraging the expertise and resources of both sectors, we aim to offer innovative courses and workshops that equip participants with relevant skills and insights for the evolving landscape of technology and computing.

Activity Highlights

Summer Schools 2023

- ACM India Summer School on "HPC and AI Compute Continuum"
- ACM India Summer School on Cybersecurity (for women students only)
- ACM India Summer School on Algorithmic Techniques in Computational Biology
- ACM India Summer School on "Algorithms for Data Science"

Winter Schools 2023

- Recent Trends on AI and ML for Industry 4.0
- Cryptography and Cybersecurity
- Full stack Networking --- in-kernel networking to cloud application networking
- Algorithmic Foundations of Data Science
- Network Science: Theory & Applications
- AI for Social Good (Women Only)

LEARNING INITIATIVES: DIVERSITY, EQUITY, & INCLUSION

The Learning Initiatives Committee has tried to ensure diversity in all the activities of the committee. The committee has taken great care in ensuring that there is a healthy gender and regional diversity.

Summer & Winter Schools

During each iteration, there is a dedicated school exclusively for female students. Efforts have been undertaken to distribute these schools across various locations throughout India, promoting diversity.

Comments / Future Plans

    (i) ACM Minigraph needs formation of the global Editorial board (EB). The board will be chaired by Prof Ramanujam (Jam). Future Minigraphs will be under the Global Initiatives.

(ii) Proposed Annual Workshop

- Authors (residing in India) of papers published in Top Tier conferences to be invited to a Workshop where they present their work
- The Theme of the Workshop will change each year

ACM INDIA AWARDS

BASIC INFORMATION

Chair

Ranjita Bhagwan, Google (Chair)

Members

Supratik Chakraborty, IIT Bombay (Execom representative); Hemant Pande, ACM India Council; Lipika Dey, Ashoka University; Jayant Haritsa, IISc Bangalore; Pankaj Jalote, IIIT Delhi; Kiran Deshpande, TiE
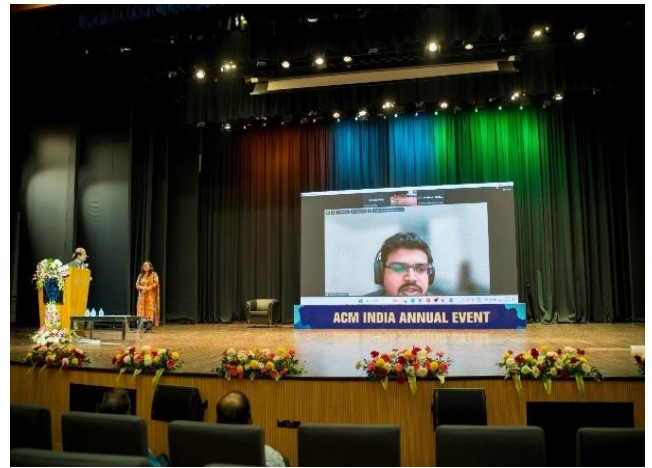
Purpose / Vision of the committee

To facilitate the selection and recognition of outstanding contributions by computing professionals and students from India. To determine purpose, procedure and logistics of handing out annual ACM India awards, and also to expand the awards ecosystem and encourage more applications.

Many professional bodies recognize and respect outstanding contributions by individuals in their field. The goal of the ACM India awards is to recognize such contributions to the field of computing, particularly research, innovations and education. In order to recognize outstanding technical and professional contributions to the field of computing from India, the ACM India Council instituted three prestigious annual awards in 2020, while the Doctoral Dissertation award already existed since 2012.

ACM INDIA AWARDS: ACTIVITY HIGHLIGHTS

Four awards were given for the year 2023. These were:

1. **ACM India Doctoral Dissertation Award (DDA):** DDA recognizes the best doctoral dissertation from degree-awarding institutions based in India for each academic year, from July 1 to June 30 in the current cycle. The Award is accompanied by a prize of ₹2,00,000. An honorable mention award, if any, is accompanied by a prize of ₹1,00,000. The dissertation(s) are published in the ACM Digital Library. Tata Consultancy Services Ltd. is the founding sponsor of the ACM India Doctoral Dissertation Award.
   a. **Committee for 2023**: Rajeev Alur (Chair), University of Pennsylvania; Anindya De, University of Pennsylvania; Jyotirmoy Deshmukh, University of Southern California; Rishab Goyal, University of Wisconsin Madison; Mohit Iyyer, University of Massachusetts Amherst; Dinesh Jayaraman, University of Pennsylvania; Varun Kanade, University of Oxford; Kuldeep Meel, National University of Singapore/University of Toronto; Mukund Raghothaman, University of Southern California; Gagandeep Singh, University of Illinois Urbana-Champaign; Rachee Singh, Cornell University; Ashutosh Trivedi, University of Colorado; Arcot Sowmya, University of New South Wales
   b. **Nominations:** 19 nominations received and reviewed thoroughly over 3.5 months
   c. **Winner:** Pranjal Dutta, for his thesis titled "A Tale of Hardness, De-randomization and De-bordering in Complexity Theory", from Chennai Mathematical Institute.
   d. **Honorable Mention:** Jogendra Nath Kundu, for his thesis titled "Self-supervised Domain Adaptation Framework for Computer Vision Tasks", from Indian Institute of Science.

2. **ACM India Early Career Researcher (ECR) Award:** ECR recognizes individuals in early stages of their careers, who have made fundamental, innovative, and impactful contributions to the computing field while primarily working in India. The award carries a prize of ₹15 lakhs, sponsored by Persistent Foundation.

    a.   **Committee:** Sunita Sarawagi (Chair), IIT Bombay; Amr El Abbadi, University of California, Santa Barbara; Naveen Garg, IIT Delhi; Nutan Limaye, IT University of Copenhagen; Y Narahari, IISc Bangalore; Venkat Padmanabhan, Microsoft Research India; S Sudarshan, IIT Bombay

    b.   **Winner:** Siddharth Barman, IISc Bangalore *"for pioneering contributions to important problems at the intersection of computer science and microeconomics, in particular, to algorithmic game theory and to the theory of fair and efficient resource allocation."*

3. **ACM India Outstanding Contributions to Computing by a Woman (OCCW) Award:** OCCW recognizes women professionals who have made fundamental, innovative, impactful contributions to the computing field primarily working in India. The award carries a prize of ₹7 lakhs. Financial support for this award is provided by Google.
   a. **Committee:** Sandhya Dwarkadas (Chair), University of Virginia; Ranjita Bhagwan, Google; Gargi Banerjee Dasgupta, IBM; Venkatesh Kamat, IIT Goa; Shwetak Patel, University of Washington; Rajeev Rastogi, Amazon Bangalore; Barbara Ryder, Virginia Tech
   b. **Winner:** Nutan Limaye, IIT Bombay and IT University of Copenhagen *"for her outstanding contributions, while in India, to computational complexity, and her active encouragement and mentoring of women in the field."*

4. **ACM India Outstanding Contributions to Computing Education (OCCE) Award:** OCCE recognizes individuals who have made fundamental, innovative and impactful contributions to computing education in India. The award carries a prize of ₹7 lakhs. Financial support for this award is provided by Microsoft Research India.
   a. **Committee:** M. Balakrishnan (Chair), IIT Delhi; Partha P. Chakrabarti, IIT Kharagpur; Manish Gupta, Google Research India; Susan Rodger, Duke University; Sartaj Sahni, University of Florida, Gainesville
   b. Winner: Sudip Misra, IIT Kharagpur *"for impactful contributions to IoT and Networks education through online courses, textbooks, short-term courses, research and laboratory development."*

ACM INDIA AWARDS: DIVERSITY, EQUITY & INCLUSION

The four awards represent diversity in recognizing the contributions by students and career professionals, through impactful research and education, including specific awards for young professionals and women from industry as well as academia. The Committee plans to actively reach out to women and under-represented groups within the computing community in India to encourage more nominations for the four awards from these groups.

COMMENTS/FUTURE PLANS

1. The awards chairs Sunita Sarawagi (ECR), M. Balakrishnan (OCCE), and Sandhya Dwarkadas (OCCW) have completed the two year stint as chair. While Sandhya Dwarkadas has agreed to continue to chair the OCCW committee, Y Narahari (IISc Bangalore) will chair the ECR selection committee while Partha P Chakrabarti (IIT Kharagpur) will chair the OCCE committee. Rajeev Alur will continue to be the chair for DDA selection committee for the 2024 edition.

2. Some of the existing committee members continue to provide continuity and some new members are being inducted for the 2024 cycle of the various awards. The updates to the committees will happen during the June-July 2024 timeframe.

3. The committee recognizes that there are many more nomination-worthy individuals in India beyond the nominations we have received in the past few years. The committee therefore intends to do a more extensive reachout for nominations in the 2024-2025 cycle. In addition, for ECR, OCCW and OCCE, the committee intends to roll over unsuccessful nominations from one cycle to the next cycle (with approval of the committee), modulo meeting statutory requirements and after appropriate updates of the nomination by the nominator.

APPENDIX

List of all committee members, subcommittee or subunit chairs and members of various awards committees.

Steering Committee
- Ranjita Bhagwan (Chair), Principal Engineer, Google Global Network.
- Supratik Chakraborty, Professor, Indian Institute of Technology Bombay
- Kiran Deshpande, Board Member TiE Global & IITB Alumni Association
- Jayant Haritsa, Senior Professor, Indian Institute of Science (IISc) Bangalore
- Pankaj Jalote, Distinguished Professor, Indraprastha Institute of Information Technology, Delhi
- Hemant Pande, Executive Director, ACM India Council

Jury, ECR Award
- Naveen Garg, IIT Delhi
- Arvind Krishnamurthy, University of Washington
- Vipin Kumar, University of Minnesota
- Mausam, IIT Delhi
- Sunita Sarawagi (Chair), IIT Bombay
- Moshe Vardi, Rice University
- Gerhard Weikum, Max Planck Institute for Informatics

Jury, OCCW Award
- Pallavi Arora, Vice President CX Centers - APJC, Cisco Systems India
- Ranjita Bhagwan, Principal Engineer, Google Global Network.
- Sandhya Dwarkadas (Chair), Professor and Chair, Department of Computer Science, University of Virginia
- Venkatesh Kamat, Visiting Professor, IIT Goa
- Shwetak Patel, Washington Research Foundation Entrepreneurship Endowed Professor, University of Washington
- Rajeev Rastogi, Vice President Machine Learning, Amazon Bangalore
- Barbara Ryder, Professor Emerita, Department of Computer Science, Virginia Tech

Jury, OCCE Award
- M. Balakrishnan (Chair), Honorary Professor, IIT Delhi
- Partha P. Chakrabarti, Professor, IIT Kharagpur
- Manish Gupta, Director, Google Research India
- Susan Rodger, Professor of the Practice of Computer Science, Duke University
- Sartaj Sahni, Distinguished Professor, University of Florida, Gainesville

Jury DDA
- Somesh Jha (Chair), University of Wisconsin-Madison
- Suman Banerjee, University of Wisconsin-Madison
- Kamalika Chaudhuri, University of California, San Diego
- Madhusudan Parthasarathy, University of Illinois at Urbana-Champaign
- Gagandeep Singh, University of Illinois at Urbana-Champaign
- Deepak Vashisht, University of Illinois at Urbana-Champaign

- Rachee SIngh, Microsoft/Cornell University
- Rajalakshmi Nandakumar, Cornell University
- Varun Kanade, Oxford University
- Rishab Goyal, University of Wisconsin-Madison
- Jayaram Raghuram, University of Wisconsin-Madison
- Ashok Veeraraghavan, Rice University

INDUSTRY ENGAGEMENTS

BASIC INFORMATION

Chair

B. Ravindran (Chair), Anand Deshpande, Kiran Deshpande, Ranjita Bhagwan, Meenakshi D'Souza, Hemant Pande (Execom Representative)

Purpose / Vision of the committee

Increase awareness and influence of ACM India and scale the efforts to advance computing through partnership and collaboration with external non-academic entities, in particular the computing industry and the practitioner community in India. The committee is a major source of net revenue for ACM India through industry sponsorships, the other sources being individual membership subscriptions. The very purpose of the committee is aligned with the DEI mission of ACM India in that it addresses a segment of the community under-served by ACM: industry and practitioners. The Industry Engagement Committee initiatives in turn strive for participation of representatives of all geographies, gender, technology areas etc.

INDUSTRY ENGAGEMENTS: ACTIVITY HIGHLIGHTS

A. Institutional Partnership Program: One-stop-shop for Indian computing industries to participate in ACM India activities, provide avenues for their employees to engage with ACM, and provide financial support to ACM India through annual subscription at Silver, Gold or Platinum tiers. In turn, ACM India provides certain benefits to the partner, such as branding in ACM India activities, preferential participation, conference discounts and complimentary membership to certain employees.
    - Ongoing: This initiative has been a unique industry and practitioner oriented program of ACM India council since 2019, involving formal participation by industry. The initiative is also a major source of funding for ACM India, matching or even surpassing the revenue from individual membership fees.
    - Persistent, TCS Research continued as platinum tier partners
    - Google continued as Gold tier partner
    - Carelon, Cisco, Dell, Flipkart and IBM were silver tier partners. Among these, Cisco was a partner until September 2024, Carelon until March 2024, while Flipkart came on board in December 2023.
B. Industry leaders and young practitioners roundtables: For ACM India to be a true representative of the entire computing community in India, we realize it needs to have parity in the initiatives and recognition directed towards practitioners and researchers. Justifiably today the perception is that the focus is on research oriented initiatives. In order to understand where our Practitioner oriented efforts should be focused, we organized two roundtables events:
    - June 2024 Industry leaders' roundtable in Bangalore, attended by 12 eminent industry leaders, and
    - September 2024 young practitioners roundtable in Pune, attended by 10 early career computing professionals in industry.

Some of the suggestions from these roundtable sessions were:
- Organize practitioner / applied technology tracks in ACM conferences
- Institute non-research oriented recognitions (awards, certificates) for practitioners
- Introduce more practitioner upskilling offerings, such as minigraphs, sessions for start-ups, certifications

- Create occasions for "professional socializing" for practitioners
- Increase visibility of ACM through ads, SEO, social media
- Create organizational involvement which incentivises employees to participate.

We will be stepping up the efforts towards practitioners and professionals based on the ideas garnered from these interactions.

C. Pingala Interactions in Computing: Early February 2024 saw the launch of ACM India's prestigious research networking event "Pingala Interactions in Computing" (PIC) at Mysore campus of Infosys, which was a major success by any standards. Attended by eight eminent laureates in computing and 48 young researchers from academia and industry who represent the future generation of computing leadership, we received uniformly positive feedback about the content, interactions, and logistics of the event. Encouraged by the response, we expect it to be not only a highly sought-after event organized by ACM India, but also a pathfinder for ACM organizing similar activities around the globe. Thanks to industry and professional organization sponsorships (from Infosys, ACM, Google, VLDB Endowment, Mysore Park Workshops and Pullur Foundation), this event was entirely a self-sustained initiative by the Industry Engagement Committee.

DEI INITIATIVES

BASIC INFORMATION

Chair

Shweta Agrawal (Chair), Meenakshi D'Souza, M Balakrishnan, Viraj Kumar, Heena Timani, Hemangee Kapoor, Chitra Babu

Purpose /Vision of the committee

ACM India is committed to fostering an environment of equality and respect amongst all its members, transcending divisions created by gender, background, geography, physical and cognitive abilities, caste, religion and such others.

To implement this commitment within all its activities and mindset, ACM India undertakes numerous initiatives such as (i) creating awareness about challenges related to DEI, (ii) collating resources to assist members to seek assistance, (iii) proactively organizing activities in ACM India workshops and events to promote DEI, (iv) building diverse teams, especially encouraging DEI in leadership roles, (v) incentivizing DEI efforts in applications for ACM India funding.

ACTIVITY HIGHLIGHTS

These are the activities we are currently working on:

1. Prepare a webpage that states ACM India's policy about harassment and guides complainants on how to take action: Shweta, Chitra, Meenakshi, Heena

   - Received guidance from Vicki Hanson at ACM HQ
   - Specify policies for conduct
   - Outline Ethics, Harassment, Publications violations.
   - List resources that people can use to file complaints
   - Provide guidance to individuals who reach out to us

2. Work with NPTEL to prepare a VI friendly course. Prepare video to guide people with best practices for accessibility while developing course content. Bala, Viraj, Shweta.

   - Working with Dr. Piyush Chanana from IIT Delhi to make NPTEL courses more accessible. Initial testing of NPTEL pages done.
   - Announced ACMI-NHACT fellowship
   - Working with Dr. Rohan Paul, hoping to design accessible programming course for NPTEL.

3. Awareness: Ask student chapters to suggest a problem and propose a solution in the DEI space. Ask them to make DEI posters (maybe competition). Meenakshi, Hemangee

4. Awards for student chapters: Constitute some award for student chapters that do well in (3) and show activity in DEI. Hemangee

5. Webinars on DEI: Chitra
   - Swaroop Joshi from BITS Goa to give an iSIGCSE webinar aimed at CS faculty on introducing topics on Accessibility into the CS curriculum.

6. GenAI tools for VI students: Viraj, Bala

- Viraj met with <u>Dan Zingaro</u> who works actively in the space of programming for VI. Discussed concerns that AI code-generation will **widen the gap** between sighted and VI programmers and approaches to mitigate the same.

7. Spread awareness about DEI through social media: Hemangee

8. DEI Essays/Interviews for visibility: Meenakshi and Manik Gupta working on this.

COMMENTS/FUTURE PLANS

Hold AMA on Zoom regarding DEI, hold webinars, use social media to disseminate posters and events about DEI.

CONSTITUTION & BYLAWS

BASIC INFORMATION

Chair

Jayant Haritsa (Chair), P J Narayanan, Abhiram Ranade, Bipin Mehta, Meenakshi D'Souza, Hemant Pande, Chandrashekhar Sahasrabudhe (Execom Liaison)

Purpose /Vision of the committee

ACM India was founded in 2010, and since then has grown enormously in both scope and impact. The charter of this committee is to revisit its constitution, bylaws, rules and regulations, and harmonize them with the current avatar. Specifically, we wish to craft streamlined documents that support a rationalized and coherent governance structure, including clarifying the relationships with linked bodies such as ACM HQ, Indian student and professional chapters, and ACM-W India.

CONSTITUTION & BYLAWS: ACTIVITY HIGHLIGHTS

1. ACM HQ has constituted a Presidential Task Force (PTF) to study and rework the bylaws from a global perspective. ACM India members on the PTF have vigorously championed the need to showcase regional councils in the HQ meetings. In particular, that all regional council Presidents (or their designated representatives) should be permanent invitees to HQ Council meetings, and should have an opportunity to present updates on their programs and activities in these meetings.
2. We have clarified with HQ that changes in the global bylaws – for instance, term tenures – do not require to be automatically followed in the ACM India byelaws. That is, beyond adhering to the core ACM principles, there is flexibility in constructing our regional constitutional framework.
3. The elections to the ACM India Council have been shepherded by a Nominating Committee (NC) comprising Hemangee Kapoor, Venkatesh Kamat, Chandrashekhar Sahasrabudhe and Jayant Haritsa (chair), and a slate of 17 candidates has been identified for the 8 vacancies on the Council. As a new measure, the candidates have to permit vetting of their nominations through the ACM Sanctions Database, and agree to fully abide by the outcome of the elections as released by the NC, accepting this verdict as final and binding.
4. As a good financial practice, several dormant accounts of ACM India in Pune banks have now been closed. Further, to reduce the load of the current mechanism for bulk payments, a digital payment interface has been enabled on the Razorpay platform.
5. A chronologically sequential set of change requests to the byelaws have been filed with the Charity Commissioner (CC) in Pune to address the accumulated lacuna of the past decade and bring our documentation up to date. However, due to a variety of administrative reasons, progress has been slow on this front, but we hope to eventually take the process through to closure.

CONSTITUTION & BYLAWS: DIVERSITY, EQUITY, & INCLUSION

Our discussions and recommendations incorporate these sensibilities.

COMMENTS/FUTURE PLANS

1. We will continue to engage with the HQ PTF on Bylaws and provide inputs for creating mutually beneficial frameworks between HQ and the Regional Councils.

2. ACM HQ has also constituted a Presidential Task Force (PTF) to investigate the setting up of Regional Offices across the globe, and includes ACM India members in the team. As part of its charter, this PTF will provide recommendations for developing synergistic interactions between the Regional Offices and the Regional Councils.

3. Current payment mechanisms for ACMI memberships and subscriptions are through traditional instruments such as credit cards, challans, etc. Given the remarkable success and convenience offered by UPI-based payment mechanisms in India, we wish to support this mode as well from the coming year.

4. Currently, only Professional members are eligible to vote in the ACM India Council elections. A suggestion has been made to consider permitting our student members to also vote in the Council elections – we will discuss this issue in our committee.

EDUCATION

BASIC INFORMATION

Chair

Viraj Kumar (Chair), Venkatesh Raman (ExeComm), Chitra Babu, Pankaj Jalote, Uday Khedker, R. Ramanujam, Vipul Shah, R. Venkatesh, Neelima Gupta, Neha Karanjkar, Kaarthik Sivakumar, R. Venkateswaran

Purpose /Vision of the committee

Advancing the Science and Profession of Computing Education.

EDUCATION: ACTIVITY HIGHLIGHTS

TPP

- We have run the existing model of the Teaching Partnership Program (TPP) with several institutions. While these partnerships have been largely successful, their impact is limited since the class sizes have usually been small.
- To enhance impact, we have formed partnerships with two large institutions (VIT Chennai and SRM University) and we have agreed upon a new train-the-trainer TPP model to have impact on large courses with 20+ sections.
- We have drafted an MoU with AICTE to to work jointly on at least these ways of improving the quality of Computer Science education in India:
    1. ACM India members will assist AICTE in reviewing proposals for AICTE faculty development programmes in computing domains.
    2. ACM India and AICTE will jointly conduct high-quality faculty development programmes.
    3. ACM India will identify eminent speakers for delivering lectures in Computer Science to institutions across India.

CompEd 2023

Basic Information

Conference Committee

Role	Name	Affiliation
Conference Chair	Venkatesh Choppella	IIIT Hyderabad
	Deepak B Phatak	IIT Bombay
Program Chair	Andrew Luxton-Reilly	University of Auckland
	Michelle Craig	University of Toronto
Working Group Chair	Viraj Kumar	IISc Bengaluru
Posters & Panels Chair	James Paterson	Glasgow Caledonian University, UK

Doctoral Consortium Chair	Steve Cooper	University of Nebraska–Lincoln
	Susan H. Rodger	Duke University
Treasurer	Chandrashekhar Sahasrabuddhe	ACM India
Registrar	Rachelle Hippler	Baldwin Wallace University
Proceedings Chair	Bedour Alshaigy	Uppsala University
Submission and Review Chair	Simon	Unaffiliated
Publicity Chair	Neeldhara Mishra	IIT Gandhinagar
Web Chair	Mrityunjay Kumar	IIIT Hyderabad
Local Arrangements Chair	Karthik Vaidhyanathan	IIIT Hyderabad
	Raman Saxena	IIIT Hyderabad
DEIA Chair	Nazia Akhtar	IIIT Hyderabad
	Radhika Krishnan	IIIT Hyderabad
Conference Secretary	Sahiti Potnuru	IIIT Hyderabad
Steering Committee	Brett A. Becker	University College Dublin, Ireland
	Dan Garcia	Berkeley, USA
	Alison Clear	Eastern Institute of Technology, New Zealand
	Susan H. Rodger	Duke University
	Ming Zhang	Peking University, China
	Venkatesh Choppella	IIIT Hyderabad

CompEd 2023 Highlights

Over 110 computer science educators and students from nine countries convened at the 2nd CompEd conference in Hyderabad, India. CompEd, the ACM Global Conference on Computing Education, held every other year outside of North America and Europe, aims to foster global computing education development. The 2023 conference was held in Hyderabad, India after a two-year COVID hiatus. CompEd was hosted by the International Institute of Information Technology, Hyderabad (IIITH) from December 5-9, 2023. The schedule included working groups on December 5-6, a doctoral consortium on December 6 and the main conference on December 7-9. The conference also included a cultural tour of the Shilparamam crafts bazaar on December 7 and a banquet dinner. ACM India's

iSIGCSE held its annual computing education conference COMPUTE 2023, which was co-located with CompEd on December 9.

The program exemplified the strength of ACM computing education. There were two working groups titled "Teaching students to use compiler error messages" and "Where is the data? Finding and reusing datasets in computing education" with a total of 21 participants. The doctoral consortium showcased the work of five doctoral students, all from India. A total of 23 papers and 21 posters were presented at the conference in addition to three panel discussions.

The conference featured three keynote presentations. Pankaj Jalote, Distinguished Professor at IIIT Delhi, kicked off the event with a keynote on "Model CSE Curriculum Design for India and Teacher Training Effort." Yasmin B. Kafai, Lori and Michael Milken President's Distinguished Professor at the University of Pennsylvania, delivered a keynote on "Empowering the Next Generation of Computational Thinkers." On the third day, Samuel Mann, Professor at Otago Polytechnic, New Zealand, delved into "Searching for Computing's Soul: Professional Practice and the Future of Computing Education."

The Best Paper Award was presented to Nimisha Agarwal, Viraj Kumar, Arun Raman, and Amey Karkare for their paper "A Bug's New Life: Creating Refute Questions from Filtered CS1 Student Code Snapshots." The Program Chair's Award recognized Bryce Ikeda, Janine Hoelscher, Ron Alterovitz, and Daniel Szafir for their paper "Guiding the Development of Undergraduate Educational Robotics."

CompEd 2023: Diversity, Equity, & Inclusion

Substantial efforts were taken to promote diversity, equity, inclusion and accessibility at the conference. Some of the steps taken by the team are as follows:

1. A Diversity, inclusion and anti-harassment policy was drafted and published on the website and displayed at the venue.

2. The initial program featured keynote speeches delivered by two male speakers. Subsequently, recognizing the importance of diversified representation, it was decided to invite a qualified female speaker.

3. A women's lunch was organized to bring together women researchers in Computing Education. It was well appreciated by the attendees and many were able to make meaningful connections.

4. Presenters were given guidelines on delivering inclusive presentations, while session chairs were provided with guidelines on running inclusive sessions.

5. It was ensured that the conference venue was as accessible as possible. The team ensured the availability of a breastfeeding room, a quiet room and gender neutral and wheelchair accessible washrooms.

6. Allergen information was collected from registrants and meals were modified accordingly.

COMPUTE 2023

Basic Information

Conference Committee

Conference Chair	Viraj Kumar	Indian Institute of Science, Bangalore
Program Co-Chairs	Chitra Babu Neeraj Goel	SSN College of Engineering, Chennai Indian Institute of Technology (IIT), Ropar
Organizing Chair	S. Durga Bhavani	University of Hyderabad, Hyderabad
Publication Chair	Amey Karkare	IIT Kanpur
Finance Chair	Chandrashekhar Sahasrabuddhe	ACM India Council
Publicity Chair	Tilottama Goswami	Vasavi Engg. College, Hyderabad
Registration Chair	Abhijat Vichare	Independent Consultant
Web Chair	Mrityunjay Kumar	IIIT Hyderabad
DEIA Chair	Manik Gupta	BITS Pilani, Hyderabad

Purpose /Vision of the committee

COMPUTE is an annual Indian conference supported by ACM India and iSIGCSE in cooperation with ACM and SIGCSE. The School of Computer and Information Sciences organized COMPUTE 2023 from Dec 9 -11, 2023, at the University of Hyderabad. The focus of COMPUTE is to improve the quality of computing education in the country by providing a platform for academicians and researchers to interact and share best practices in teaching, learning, and education in general.

Program Committee

Neelima Gupta	Delhi University
Amey Karkare	IIT, Kanpur
Abhijat Vichare	Independent Consultant
Ram Rustagi	Visiting Professor, University of Maryland, Baltimore County, Maryland, USA
Renuka Sindhgatta Rajan	IBM
Vandana Naik	Goa University

Bhumika Shah	Gujarat University
Nitin Patil	Pune University
Prajish Prasad	FLAME University, Pune
Deepti Reddy	SIES Graduate School of Technology, Navi Mumbai
Arun Raman	BITS Pilani, Goa Campus
Neeldhara Misra	Indian Institute of Technology (IIT), Gandhinagar
Sruti Srinivasaraghavan	Indian Institute of Technology (IIT), Kanpur
Chayan Sarkar	TCS Innovation Lab
Swaroop Joshi	BITS Pilani, Goa Campus
Lakshmi Ganesh	Kotak Education Foundation, Mumbai

Compute 2023 Highlights

Day-1 (9th Dec 2023)

Prof. Abhay Jere, Vice-Chairman of AICTE, was the chief guest at the inaugural ceremony of ACM India COMPUTE 2023 on December 9th at IIIT Hyderabad, which was held simultaneously with ACM CompEd 2023. During his address, he stressed the significance of fostering innovation and entrepreneurship among students.

Keynote session 1: Prof. Samuel Mann (Otago Polytechnic Te Pukenga, New Zealand), in his thought-provoking talk, challenged the computing community to redefine its purpose, emphasizing the need for a values-driven profession.

Day 2: 10th Dec 2023 (UoH)

The conference was inaugurated by Prof. BJ Rao, Vice Chancellor of UoH, on 10th Dec at Zakir Husain Lecture Complex, University of Hyderabad.

Keynote session 2: Prof. Aman Yadav (Michigan State University, USA) addressed the integration of computing in primary education, advocating for a shift from coding-centric approaches to aligning with core curriculum goals.

A joint cultural performance by the students and alumni of SN School and SCIS featured classical dance and music, showcasing the rich cultural heritage of our country, followed by a banquet dinner.

Keynote session 3: Prof. Sudip Mishra (IIT Kharagpur, Winner of ACM OCCE Award) shared his experiences in IoT research and education, emphasizing its transformative impact on smart healthcare, agriculture, and education.

Day 3: 11th Dec 2023

Keynote session 4: A standout presentation came from Rakesh Paladugula (Sr. Product Manager for Accessibility, Adobe Inc.), being visually impaired, he focused on "Defining Disability Inclusive Education." Paladugula underscored the importance of inclusivity in the digital age, highlighting accessibility of material used with the shift from physical to virtual classrooms.

Keynote session 5: Prof. Ashish Amresh (Northern Arizona University, USA) explored the fusion of generative AI and game-based learning, showcasing the potential for scalable personalized education solutions.

Compute 2023: Diversity, Equity, & Inclusion

Care was taken by the organizing team to collect participants requirements for accommodation and food preferences, beforehand, while making the arrangements. In the venue, a gender-neutral toilet as well as one with disability access were made available. An initiative was made to take feedback from the participants on the inclusivity of COMPUTE.

Comments/Future Plans

The participants appreciated the topics of the conference and praised ACM for the support provided and the local organizing team for all the arrangements made. A few attendees expressed the opinion that the conference could avoid parallel sessions as they felt they missed an important workshop. There is a need to strengthen the DEI initiatives in the future editions of the conference.

EDUCATION: DIVERSITY, EQUITY, & INCLUSION

We have been working closely with the DEI committee on two education-related projects:

1. Including a DEI-themed keynote at the annual COMPUTE conference.
2. Working with blind/visually impaired developers on developing software tools to comprehend code (a significant impediment for such developers, particularly when the proportion of AI-generated code is growing.)

COMMENTS/FUTURE PLANS

After the MoU with AICTE is signed, we are looking forward to working with AICTE on the joint work mentioned above. Further, we are looking to launch the revised version of TPP this summer.

RESEARCH FACILITATION

BASIC INFORMATION

Chair

Ponnurangam Kumaraguru (Chair), IIIT Hyderabad;

Supratik Chakraborty (Execom representative), IIT Bombay; Amey Karkare, IIT Kanpur; Chester Rebeiro, IIT Madras; Hemangee Kapoor IIT Guwahati; Jibi Abraham, COEP; Karthik Vaidhyanathan, IIIT Hyderabad; Keerti Choudhary, IIT Delhi; Mainack Mondal, IIT Kgp; Manas Thakur, IIT Bombay; Niharika Sachdeva, Naukari.com; Rishabh Kaushal, IGDTUW; Saket Saurabh, IMSc Chennai; Saurabh Tiwari, DA-IICT; Shelly Sachdeva, NIT Delhi; Siddhartha Aasthana, Mastercard; Suganya R, VIT Chennai

Purpose /Vision of the committee

To enable research activities, help research students / industry in improving the quality of research

Sub-Committees, if any

1. ACMI-IARCS travel grants:
   a. Charter: To evaluate the grant proposals, give feedback, accept / reject the proposals
   b. Members: Prof. Amey Karkare, IIT Kanpur; Prof. Chester Rebeiro, IIT Madras

2. ARCS:

   a. Charter: To plan, and organize the annual ARCS conference

   b. Members: Prof. Rijurekha Sen IIT Delhi; Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

3. Research Career in Computer Science

   a. Charter: To excite UG students about research in Computer Science; show them the possibilities and opportunities pursuing research in Computer Science

   b. Members: Prof. Saket Saurabh, IMSc Chennai; Prof. Biswabandan Panda, IITB; Prof. Venkatesh Raman, IMSc Chennai; Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

4. Conference / Workshop approvals

   a. Charter: To evaluate the conference / workshop proposals, give feedback, accept / reject the proposals

   b. Members: Prof. Shelly Sachdeva, NIT Delhi; Prof. Jibi Abraham, COEP; Prof. Supratik Chakraborty, IIT Bombay; Prof. Hemangee Kapoor IIT Guwahati

5. PhD Clinic

   a. Charter: To facilitate CS PhD students from all over the country to obtain inputs and advice from expert mentors located in premier academic institutions and industry. Mentors spend a few hours each month talking to students and giving concrete and constructive suggestions on their work. Each clinic session is a one-on-one engagement, and a student gets to choose a mentor who works in his/her area from the available list of mentors.

b. Members: Dr. Niharika Sachdeva, InfoEdge; Prof. Mainack Mondal, IIT KGP; Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

6. Anveshan Setu

 a. Charter:

 i. To provide CS/IT PhD students in India:

1. an opportunity to get up close and personal with best research practices outside their parent institutes.

2. a longer and more intense mentoring experience beyond ACM India PhD Clinic.

 ii. To develop Anveshan Setu into a premium-value program over the next three years—something that every CS/IT PhD student in India would aspire to participate in their PhD career.

 b. Members: Prof. Rishabh Kaushal, IGDTUW; Prof. Rajiv Ratn Shah, IIIT Delhi; Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

7. PhD Workshops

 a. Charter: To organize focussed sessions on different technical and non-technical aspects of PhD life.

 b. Members: Prof. Shelly Sachdeva, NIT Delhi; Prof. Jibi Abraham, COEP; Prof. Saurabh Tiwari, DA-IICT; Dr. Siddhartha Aasthana, Mastercard; Prof. Suganya R, VIT Chennai; Prof. Supratik Chakraborty, IIT Bombay; Prof. Hemangee Kapoor IIT Guwahati; Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

8. PhD Students Meetup

 a. Charter: To facilitate a platform (in the form of workshops) for PhD students to interact among other PhD students in the country.

 b. Members: Dr. Siddhartha Aasthana, Mastercard; Prof. Suganya R, VIT Chennai; Prof. Supratik Chakraborty, IIT Bombay; Prof. Ponnurangam Kumaraguru, IIIT Hyderabad

9. Research Facilitation Grant:

 a. Charter: This grant is targeted at supporting PhD students, Postdocs, early career faculty members from institutions in India with limited research support funding, and Masters (with thesis work) students by funding expenses related to publication in open-access journals & conferences, attending top quality invitation-only research seminars/workshops/summer schools (e.g., Dagstuhl Seminars), and costs for additional pages for journal and conference papers. All applicants must be studying or pursuing their careers in India at the time of application. However, they need not be an ACM member.

 b. Members: Karthik Vaidhyanathan, IIIT Hyderabad; Keerti Choudhary, IIT Delhi; Manas Thakur, IIT Bombay; Hemangee K. Kapoor, IIT Guwahati; Supratik Chakraborty, IIT Bombay; Ponnurangam Kumaraguru, IIIT Hyderabad.

RESEARCH FACILITATION: ACTIVITY HIGHLIGHTS

1. ACMI-IARCS travel grants:
   a. 498 applications received
   b. 83 approved
   c. Some are in-progress / evaluation

2. ARCS 2024: See the section below that gives a detailed account.

3. Research Career in Computer Science

   a. Oct 2023: TKM College of Engineering, Kollam, Kerala; 200+ students
   b. Nov 2023: IIIT Delhi; 40+ students
   c. Jan 2024: IIT Madras; 175+ students
   d. Feb 2024: IIT Bombay; 185+ students
   e. April 2024: IIT Hyderabad Website; 185+ students
   f. April 2024: NIT Trichy; 165+ students

4. Conference / Workshop approvals

   a. 10+ proposal reviewed
   b. 7+ proposal approved

5. PhD Clinic

   a. # of mentors: 40
   b. # of mentors added: 2
   c. 75+ sessions between Mentors & Students conducted
   d. Total # of mentees in the program: 350+

6. Anveshan Setu

   a. # of fellowships awarded for 2024 - 2025 cycle: 46

   b. # of visits completed: 20+ (couple of them from 2024 - 2025 cycle)

ACM INDIA
ANVESHAN SETU
FELLOWS 2024

7. PhD Workshops
   a. # of workshops conducted: 1
   b. Topic: Master the art of professional document creation with LaTeX
   c. # of students attended: 30+

8. Research Facilitation Grant
   a. # of applications received: 41
   b. # of applications accepted: 8

ARCS 2024

Basic Information

Chair

Arpita Patra (IISc.) and Karthik Ramachandra (Microsoft)

Purpose /Vision

Academic Research and Careers for Students (ARCS) is an annual symposium organized by ACM India where research scholars of Computer Science and allied areas in India are invited to showcase their recent (accepted) work. ARCS provides a much needed forum for PhD students to interact with one another and with other experts in the area.

Apart from the contributed talks and poster presentations, ARCS comprises talks by the ACM-India Doctoral Dissertation Award recipient (DDA), Early Career Research (ECR) Awardee and an invited Keynote Speaker. Finally, we will also have several panel discussions.

The audience comprises students, faculty and industry leaders from across India coming together in an interactive environment, such as panel discussions, informal "Ask me Anything" sessions with the ARCS speakers as well as Annual Event invitees like Turing Award laureates.

Sub-Committees, if any

Area chairs for identifying and reviewing research posters:

1. Theory:
   - Chaya Ganesh, IISc
   - Sikhar Patranabis. IBM Research
   - Mainack Mondal, IITKgp
   - Arindam Khan, IISc
   - Ramprasad Saptarishi (TIFR)
   - Akshay, IIT Bombay

2. Systems:
   - Kaustubh Beedkar, IIT Delhi
   - Mukulika Maity, IIIT Delhi
   - Rinku Shah, IIIT Delhi
   - Harish Doraiswamy, MSR India
   - Srinivas Karthik V, Huawei, EPFL
   - Vinu E Venugopal, IIIT Bangalore

3. AI/ML:
   - TANMOY CHAKRABORTY, IIITD
   - Nipun Batra, IIT Gandhinagar
   - Anusha Mujumdar, Ericsson Labs
   - Uma Sawant, LinkedIn
   - Shikhar Vashishth, Google Research

ARCS 2024: ACTIVITY HIGHLIGHTS

Student Poster Presentations

Research scholars in India working in any area of CS were invited to participate in this activity. They were given the opportunity to present a poster of their research work in ARCS, if they have a paper accepted or published in a reputed conference or journal recently. The goal is to get feedback from academia and industry, and also network with fellow PhD students. The posters were selected by a committee of area chairs as a combination of invited as well as open call for participation. The selected students were given travel and accommodation support to attend ARCS and the ACM India Annual Event.

A total of 75 posters were selected for this session, spread over 2 days. From the open call for submissions, we received 63 responses out of which 26 were selected. The area chairs selected 49 more posters from A* and B venues from different branches of CS (Area distribution: Systems 15, Theory 6, Crypto/security: 16, AI/ML: 38).

Lightning talks

The students selected for poster presentations were also given an opportunity to give a lightning talk at the conference to publicize their work and encourage the audience to visit their poster. Each presenter was given 60 seconds, and were allowed to prepare a one-slide summary of their work that was presented.

Invited talks

ARCS 2024 featured several invited talks including keynotes, award talks, early career researcher talks and panel discussions. Below are the talk details:

1. Keynotes:
   - Geetha Manjunath (NIRAMAI Health Analytix)
   - Neeraj Kayal (Microsoft Research)

2. Doctoral Dissertation award talks
   - Pranjal Dutta
   - Jogendra Nath Kundu

3. Early career researcher award talk: Siddharth Barman (IISc)

4. Early career researcher talks
   - Jyothi Vedurada (Academia)
   - Deeksha Bhartiya (Entrepreneur)
   - Manas Thakur (Academia)
   - Shikhar Patranabis (Industry research lab)

5. ACMI-W 1 OCCW Award talk: Nutan Limaye

6. Panel discussion: "Collaborative academic and industrial research in India: Past present and future"
   - Renuka Sindhgatta
   - Bhanu Murthi Modali
   - Preeti Ranjan Panda
   - Srivathsan Koundinyan

- Subhankar Mishra

Sponsor talks

We received two generous sponsorships for ARCS 2024 - Microsoft India and Plaksha University. Both got a dedicated slot with all the attendees to talk about their organizations and discuss opportunities. This was well-received by the participants.

ARCS 2024: Diversity, Equity, & Inclusion

In ARCS 2024, we paid a lot of attention to DEI and to ensure that there is good representation from diverse community members. This included diversity in terms of gender, university (Tier-1 cities, Tier-2/3 etc. different states), background (academia, startups, industry) etc. There was excellent participation from all the poster presenters from various parts of the country.

RESEARCH FACILITATION: DIVERSITY, EQUITY, & INCLUSION

In all the activities of RFC, we try to have members of diverse communities participate as speakers, students, etc. We also enable discussions among various stakeholders about this topic.

COMMENTS/FUTURE PLANS

1. ACMI-IARCS travel grants
   a. Promote this grant more to get more applications
   b. Reduce the turnaround time
   c. Increase budgetary outlay

2. ARCS
   a. Promote more
   b. Attract more participants & PhD Clinic students
   c. Get more mentors for PhD Clinic

3. Research Career in Computer Science
   a. Promote more
   b. Try to conduct 12 ROCS in the coming 12 months

4. Conference workshop / approvals
   a. Streamline the process
   b. Reduce the turnaround time

5. PhD Clinic
   a. Promote more
   b. Add mentors

6. Anveshan Setu
   a. Promote more
   b. Add mentors
   c. Get more applications for the 2025 cycle

7. PhD Workshops
   a. Conduct a few workshops

8. PhD Meetups

a. Conduct a few meetups

9. Research Facilitation Grant
   a. Promote more
   b. Get more applications

STUDENTS & PROFESSIONALS ENGAGEMENTS

BASIC INFORMATION

Members

Student Engagement Committee

Sachin Lodha (Chair), Shekhar Sahasrabudhe (ExeCom Representative), Akhilesh Kumar Sharma, Aswani Kumar Cherukuri, Geetanjali Kale, Prashant Nair, Rajnish Sharma, Ranga Rajagopal, Rutvi Shah, Yogesh Simmhan

Professional Engagement Committee

Yogesh Simmhan (Chair), Shekhar Sahasrabudhe (ExeCom Representative), Abhijat Vichare, Aswani Kumar Cherukuri, Chitra Babu, Nitin Patil, Ranga Rajagopal, Ravindra Naik, Renuka Sindhgatta Rajan, Sachin Lodha, Tilottama Goswami

Purpose of the committee

The Purpose of the Student Engagement Committee is to support tomorrow's problem solvers today. Likewise, the purpose of the Professional Engagement Committee is to support professional, SIG and ACM India-W Chapters. Both committees are working in close collaboration on several initiatives. One of their key objectives is to achieve a closer integration of student chapters with (the co-located) professional chapter(s).

Sub-Committees of the Students and Professionals Engagements Committee

1. Activity Based Funding (ABF):
   a. Charter: Nurture vibrant and collaborative chapter initiatives that help in advancing computing as a science and profession
   b. Members: Rutvi Shah (chair), Abhijat Vichare, Geetanjali Kale, Prashant Nair, RD Naik, Renuka Sindhgatta Rajan, Tilottama Goswami

2. Awards:
   a. Charter: Judge annual student chapter awards
   b. Members: Shekhar Sahasrabudhe (chair), Rajnish Sharma, Ranga Rajagopal
   c. Jury: Satish Babu (chair), Bipin Mehta, Mini Ulanat, Vineet Kapoor

3. Chapter Summit:
   a. Charter: Organize the Annual Chapter Summit, one of the important events on ACM India calendar
   b. Members: Geetanjali Kale (chair), Abhijat Vichare, Akhilesh Kumar Sharma, Nitin Patil, Tilottama Goswami

4. ESP:
   a. Charter: Re-imagine and reinvigorate the Eminent Speaker Program (ESP)
   b. Members: Yogesh Simmhan (chair), Rajnish Sharma, RD Naik, Renuka Sindhgatta Rajan, Tilottama Goswami

5. Portal:
   a. Charter: Manage, maintain, and enhance the Student Chapter Portal to support various committee initiatives
   b. Members: Rajnish Sharma (chair), Abhijat Vichare, Sachin Lodha, Shekhar Sahasrabudhe, Yogesh Simmhan

6. Chapter Approvals:
    a. Charter: Define and manage the process for new chapter approvals across different categories, and help the existing chapters maintain a good standing
    b. Members: Ranga Rajagopal (chair), Abhijat Vichare, Geetanjali Kale, Sachin Lodha, Shekhar Sahasrabudhe, Yogesh Simmhan

STUDENTS & PROFESSIONALS ENGAGEMENTS: ACTIVITY HIGHLIGHTS

The activities of both Student and Professional Engagement Committees are designed to encourage students and professionals to (a) learn from each other, (b) learn from experts, (c) build relevant skills, (d) apply learning/skills and (e) get the appropriate recognition.

As of this report there are 29 active professional chapters including 1 ACM India-W chapter and 274 active student chapters including 43 ACM India-W student chapters.

Annual Chapter Summit

ACM India has established a tradition of hosting annual flagship events that serve as platforms for engaging discussions on the latest trends in science and technology. These events not only celebrate the remarkable achievements in computing within India but also embody the spirit of ACM in fostering innovation and advancing the field.

The 2023 edition of ACM India Annual Chapter Summit was held on the 21st and 22nd of December. It was hosted by the **Manipal University Jaipur ACM Student Chapter** at their Jaipur campus. This dynamic event serves as a nexus for ACM Chapters across India, fostering collaboration and knowledge exchange. This edition of the Summit featured a lineup of distinguished speakers, sharing insights on cutting-edge advancements in technology. With representatives from various ACM Chapters participating, the conference provided a unique platform for networking, skill enhancement, and idea sharing.

The Summit was orchestrated by the ACM India Council in collaboration with Manipal University Jaipur. Dr Geetanjali Kale chaired the program with Dr Akhilesh Kumar Sharma serving as the Organizing Chair. ACM India Council members, namely, Dr Sachin Lodha, Dr Yogesh Simmhan, Dr R. Venkateswaran, and ACM India Executive Team of Shekhar Sahasrabudhe and Dr Abhijat Vichare provided significant mentoring and support. The event also received noteworthy support from Dr Tilottama Goswami.

The summit commenced with Dr Akhilesh Kumar Sharma and ACM India Secretary Dr Meenakshi D'Souza extending a warm welcome to the guests, setting the stage for an immersive experience. **Dr Viraj Kumar** provided insights into the **Challenges in Implementation of NEP in Higher Technical Education**, followed by a networking tea break. Dr Sachin Lodha presented a report highlighting initiatives based on previous summit feedback, while Dr Rutvi Shah shed light on ACM India Women initiatives. Award-winning chapters and vibrant SIGs in India showcased their activities. Post lunch, there was a panel on **Unfolding the Mysteries of Generative AI** superbly moderated by **Dr Lipika Dey** with **Dr Sriparna Saha**, **Dr Chetan Arora**, and **Dr Tanuja Ganu** sharing their perspectives and helping the audience unravel the Gen AI mystic. It was followed by a very well received **Chapter Portal Demonstration** session by **Dr Sagar Juneja**. The ending highlight of the day was **Fireside Chat** by Dr Sachin Lodha with ACM India Outstanding Contribution to Computing Education Award Winner **Dr Sudip Misra** where Dr Misra shared his inspiring career journey as a researcher, an educator, and an innovator. The day concluded with a sumptuous Gala Dinner under the moonlit skies of the Pink City.

The second day featured an insightful session on the **Impact of Human Spaceflight Technologies on Society** by **Imtiaz Ali Khan** from ISRO. Breaks facilitated networking and collaborations with sessions led by experts **Dr Vivek Borkar** and **Dr Sudip Misra** discussing **How to Write Winning Research Proposals** for the faculty members, and the other moderated by **Dr R Venkateswaran** on **Crafting Dream Careers** for the students wherein panelists **Dr Dheeraj Sanghi**, **Dr Lipika Dey**, and **Prashant Pansare** together provided a very well-rounded perspective. **Entrepreneurial success stories** session moderated by **Prashant Pansare** and hands-on parallel sessions for students and faculty on **Leveraging Generative AI for Programming** by **Dr Viraj Kumar** concluded the day, culminating in a high-energy networking session with well-planned **poster presentations** by **Dr Tilottama Goswami**.

The Summit served as an intellectual odyssey, transcending borders with diversity as its strength. It concluded with a vision for future collaborations among numerous representatives from ACM Chapters nationwide.

URL: https://event.india.acm.org/chaptersummit/home/

Activity Based Funding

A new program, Activity Based Funding (ABF), was launched in August 2023 in an attempt to partially support individual chapters within ACM India based on some identified class of activities. Started initially with a bimonthly cycle six cycles per year, the program invited proposals from ACM India chapters for activities like help building computing communities, exchange technical knowledge, or mentor students. Each proposal was, and is, reviewed by a committee and recommended to the main committee for approval.

The ABF support model is a reimbursement type model where the supported chapter conducts its activities and subsequently claims reimbursement for the approved components of the activity. As of this writing 88 proposals

have been received since the start of this program. Of these 29 have been supported, and 15 have been reimbursed.

Eminent Speaker Program

The ACM India Eminent Speaker Program (ESP) provides ACM Student and Professional chapters and institutional partners in India with direct access to top technology leaders, innovators and researchers who will give talks on contemporary and engaging issues that are important to the computing community. This outreach program is modelled on ACM's worldwide Distinguished Speaker Program (DSP) but tailored for the Indian context and with Speakers from India. Speakers who are part of the ESP Panel will list several talks in their area of expertise and be invited by chapters to give these talks as part of events that they hold. ACM India will help with the matchmaking and cover the costs for travel while the local chapter will handle accommodation and local logistics. We expect speakers to accept and participate in 3-6 visits each year. While most of these should be in-person to encourage direct engagement and interactions with the participants, some of the talks may be done virtually.

In the last year, the ESP Sub-committee formalized several guidelines for the enrolment and operations of the ESP program. In particular, to enhance the diversity and transparency of the program, it put in place guidelines for an open call for (self) nominations to the ESP panel. These nominations and selections are conducted twice a year, and an ESP Selection Committee of leading experts evaluated these applications to recommend new members to the ESP panel. We operationalized this model this year and conducted two rounds of nominations and selections in July 2023 and February 2024. We received over 65 applications in total across these rounds and the selection committee recommended about 24 new speakers to the panel. Diversity in gender and location was a key focus of the second call. As a result of this, the ESP panel currently has 38 diverse members from academia, industry, and startups.

We have also started a series of outreach activities to feature one ESP speaker each week and highlight their contributions and availability to give talks. This helps publicize the program, and also recognizes the volunteering service by the speakers in giving talks at chapters.

The Student Chapter Awards

The student chapter awards were given this year to six chapters in six categories following a thorough and methodological process by the Chapter Awards jury below. Chapters were asked to report their activities regularly on their respective portals. For the first time, we followed the process of self-nomination for these awards, and it received a great response from the Chapters with each category receiving a good number of nominations. The committee also came up with a report explaining the rationale of the process followed and a set of recommendations for conducting future competitions.

Jury: Chapter Awards

- Ranga Rajgopal (Chair), Acenet Technologies P. Ltd.
- Mini Ullanat, Cochin University of Science & Technology

- Satish Babu, CEO, InApp, Trivandrum
- Bipin Mehta, Past Chair, ACM Ahmedabad Professional Chapter
- Vineet Kapoor, Persistent Systems, Nagpur

The winners are:

- Outstanding Chapter Award (India)
  University or Petroleum and Energy Studies (UPES) ACM-W Student Chapter, Dehradun
- Outstanding Chapter Website Award
  Manipal University Jaipur (MUJ) ACM SIGBED Student Chapter, Jaipur
- Outstanding Chapter Activities Award
  Pimpri-Chinchwad College of Engineering (PCCOE) ACM Student Chapter, Pune
- Outstanding Community Service Award
  AISSMS Institute of Information Technology (IOIT) ACM Student Chapter, Pune
- Outstanding Recruitment Program Award
  Kalasalingam Academy of Research and Education (KARE) ACM Student Chapter, Madurai
- Emerging Chapter Award
  Vellore Institute of Technology (VIT) ACM-W Student Chapter, Vellore

The awards were announced in early 2024 through direct correspondence to all the student chapters and through the ACM portal (https://acmindia-studentchapters.in/). Thanks are due to Walmart Global Tech for their generous sponsorship of ₹3,00,000 for these awards.

URL: https://india.acm.org/awards/about-student-chapter-awards

Vineet Kapoor (ACM India Student Chapter Awards Jury Member) presenting the 2023 Outstanding Chapter Award to UPES ACM-W Student Chapter team

Chapter Approval Process

To harmonize and systematize the membership requirements for a chapter to be considered in good standing – then be it a student chapter or a professional one – we had recommended the minimum requirement for ACM chapters members that must also be ACM Members to be always 15 with at least 25% members from each gender. ACM HQ agreed to change the requirements from 10 to 15, however expressed their inability to enforce the gender requirement. A message with a new membership requirement of 15 has been circulated to all the chapters. For professional chapters which are unique for a given town, we are also insisting on representations from 3 or more local institutions.

PLANS

Since many Chapters have expressed interest, we are planning for the first time a Call for Proposals for the Chapters to submit their bid to host the two-day long 2024 Annual Chapter Summit. We are also working towards organizing a virtual Professional Chapter Summit during the month of July.

We expect to see a significant uptake of the activity-based funding program in this FY. Accordingly, we have provided the budgets, and are also planning to continuously monitor and improve efficacy of the approval process.

The ESP program is putting in place a portal to help track the requests and participation of the ESP speakers in visiting various chapters, and this is expected to go online in the next couple of months. We also plan to put in place a mechanism to solicit feedback from chapters on the effectiveness of the ESP program, and also recognize ESP speakers who are proactive in giving talks and benefiting the community. There are also plans to share an "outreach kit" with the speakers to help disseminate the activities of ACM India and recognize volunteers.

COMMENTS

We would like to thank Mr. Satish Babu for chairing the Awards sub-committee and for his leadership in guiding the new Awards process. We would also like to thank Abhijat Vichare for chairing the Activity Funding sub-committee and his leadership in getting this all-important initiative off to a flying start.

ACADEMIC ENGAGEMENTS

BASIC INFORMATION

Chair

Sudip Misra (Chair)

Committee Members

Supratik Chakraborty, Jayant R Haritsa, PJ Narayanan, Vipul Shah, Sonia Garcha, Hema A Murthy, Pallab Dasgupta, Viraj Kumar

Purpose/ Vision of the committee

- Engaging with academic bodies such as INAE, IASc, NASI, INSA, NCERT, AICTE, NPTEL, IEEE, and CSI.
- Exploring and nurturing synergies between ACM India and above bodies with respect to academic research and education in computing
- Establishing a mutually beneficial relationship with above bodies in the following respects:
  - Helping academic bodies benefit from ACM India's strengths
  - Benefiting ACM India members from strengths of these bodies

ACADEMIC ENGAGEMENTS: ACTIVITY HIGHLIGHTS

a) Speaker exchange between ACMI and INAE
   a. Proposal to have distinguished speakers identified by ACMI deliver lectures at INAE events and vice-versa.
   b. ACMI has already sent the proposal to INAE (Prof. Indranil Manna and Prof. P J Narayanan). In principle approval from INAE has been obtained

b) Special coverage of invited articles in the Transactions of the INAE
   a. The intent is to establish cooperation between ACMI and the Transactions of the INAE to cover invited articles from winners of DDA, OCCE, OCCW, ECR awards of ACMI in the Transactions of INAE.
   b. Initiated communication with the EiC of Transactions of INAE and he accepted the proposal.
   c. Sent invitations to ACMI awardees (doctoral dissertation awardee, early career researcher awardee, outstanding contribution to computer science by a woman awardee and outstanding contribution to computing education awardee).

c) Collaboration between ACMI and IARCS to come up with a single model for teaching schools (for college teachers), teaching workshops etc.
   a. Both ACMI and IARCS have their individual programs for training/supporting college teachers. The intent of this collaboration is to liaise between both of these organizations and their respective committees to come up with a common model for disseminating the information about the programs and make them available to the interested stakeholders.
   b. Common portal for disseminating the information about the programs conducted by ACMI and IARCS is under consideration.
   c. Three different programs (Instructional Course, Teaching Partnership Program, and CSEDU) are to be included.
   d. Website content for Instructional Training Program has been sent for being hosted on ACMI website.

d) New CS seminar series on the model of Dagstuhl seminar series. The suggested name of the series is IndiCS (short for India CS) Seminar Series. First cycle of proposals received and reviewed, and the first IndiCS seminar is scheduled to be held in Infosys Mysore campus in Aug-Sep 2024.

CSPathshala

Basic Information

Chairs

Vipul Shah and Sonia Garcha

Purpose /Vision of CSpathshala

The Association for Computing Machinery (ACM) India started an education initiative, CSpathshala (www.cspathshala.org) in 2016, to teach computing as a science in all schools. The key objectives are to popularise Computational Thinking (CT) and influence education policy to enable its introduction into the curricula. CSpathshala advocacy efforts paid off and the National Education Policy 2020 recommends that computational thinking be taught from foundational stages

Activity Highlights

CT curriculum has been piloted by 800,000 students, 2/3rd from government schools across 11 states in 4 languages and Tamil Nadu SCERT has adopted the unplugged computational thinking curriculum as part of its mathematics curriculum for 40,000 schools from 2018. CSpathshala continued its efforts and has trained 3100+ teachers through 9 awareness workshops and training programs. The 2022 Bebras India Computational Thinking Challenge was conducted in English, Marathi, Gujarati, Hindi, Kannada, Odia, Tamil and Telugu and it was conducted free. The 2023 Bebras India Computational Thinking Challenge was conducted in English, Marathi, Gujarati, Hindi, Kannada, Odia, Tamil and Telugu and it was conducted for free. The 2023 Bebras India Challenge crossed participation of 2,10,000 students across 22 states and 2 UTs in age groups 8-18. Since 2018 7,10,000 students in age groups 8-18 have participated in Bebras India Challenge.

The fifth annual conference organised by CSpathshala on Computational Thinking in Schools, CTiS2023 on 7th and 8th July, 2023 at IISER, Pune and hosted by City Pride School, Pune and SCTR's PICT ACM Student Chapter (PASC). The conference addressed the theme Enhancing teacher preparation for integrating computational thinking. We had over 200 participants at IISER Pune across 10 states and 2300+ participants online across 21 states and 5 countries (Australia, Brazil, New Zealand, Singapore and Switzerland).

Collaborated with Pratham, American India Foundation, SSA Gujarat and CARES Goa to enable participation of students in the Bebras India Challenge. Continued efforts in working with State Governments : MP RSK, AP Social Welfare & Tribal Welfare. Maharashtra SCERT, Gujarat and Goa SCERT. AMV.

CSPathshala: Diversity, Equity, & Inclusion

In partnership with Tata Steel Foundation and TCS CSR reached out to remote regions of Odisha and Jharkhand to improve children's learning levels and expose them to new knowledge areas and skills. These regions are tribally dense and forested, with hilly terrain. They are highly underserved in terms of schools and teachers. The majority of the students are first-generation learners with no home support. A large number of them fall out of

schooling and get engaged in child labour. We started an experiment to introduce computational thinking to such underserved communities through Bebras CT tasks and we had 15,941 students participate in 2023 Bebras India Challenge.

Tribal students in Odisha working in groups solving Bebras tasks on chart paper. They discuss, argue and arrive at an answer. Children from tribal communities have a very strong visual and artistic sense, and drawing is a way to learn for them. Learning by drawing and not just doing could be a pedagogical approach for such situations.

Street children in Jamshedpur hand drawing world map. The legend on the side lists the countries that developed the Bebras tasks they used.

Comments/Future Plans

In 2024-2025, CSpathshala will continue to focus its efforts with the government to mainstream CT, empower teachers and increase its reach in rural areas.

CTiS 2023

Basic Information

Chair

Sonia Garcha (Chair), Madhavan Mukund, CMI, Chennai, Meenakshi D'Souza, IIIT Bangalore, Bengaluru,Pratiksha Mujumdar, School of Scholars, Nagpur, R Ramanujam, IMSc, Chennai and Vipul Shah, TCS, Pune

Purpose /Vision of the committee

The CTiS (Computational Thinking in Schools) conference is an annual event organised by the ACM, India (Association for Computing Machinery, India) and the CSpathshala community. It aims to bring together teachers, educators and researchers to discuss issues of curriculum, pedagogy, policy and implementation, related to bringing computational thinking to schools.

Activity Highlights

The fifth annual conference organised by CSpathshala on Computational Thinking in Schools, CTiS2023 on 7th and 8th July, 2023 at IISER, Pune and hosted by City Pride School, Pune and SCTR's PICT ACM Student Chapter (PASC). The conference addressed the theme Enhancing teacher preparation for integrating computational thinking. We

had over 200 participants at IISER Pune across 10 states and 2300+ participants online across 21 states and 5 countries (Australia, Brazil, New Zealand, Singapore and Switzerland).

CTiS2023 provided a platform for 60+ teachers, educators and experts to share their best practices as well as challenges faced in implementing computational thinking in education. We were privileged to have the Keynote Address by Tim Bell, University of Canterbury, New Zealand on Teaching Computer Science – Unplugged. We also had interesting sessions by Juraj Hromkovic & Regula Lacher, ETH Zurich, Switzerland for the Invited Talk on The Three Roots of Computer Science and a Workshop Session by Teaching CT from kindergarten to high school in a spiral curriculum. Interesting teacher presentations across various thematic areas from 10 states in India and also poster presentations and exhibits of CT unplugged activities and games were important highlights of the conference. 5 abstracts were selected for the MTA regional conference at Goa and 4 abstracts have been selected for CTE-STEM2024 at Beijing.

CTiS 2023: Diversity, Equity, & Inclusion

CTiS since 2021 has a separate track for CT and Inclusion and we have received abstracts from teachers working in special needs. Facilitators, educators and teachers from Vision Empower had presented their experiences in CT activities for the visually impaired students.

ACADEMIC ENGAGEMENTS: DIVERSITY, EQUITY, & INCLUSION

No specific plans. However, efforts are always on to have representation considering DEI.

COMMENTS/FUTURE PLANS

a. Follow-up the collaboration for speaker exchange with INAE.

b. Explore the collaboration with other societies/academies.

c. Conduct the review of papers to be received from ACMI awardees and finalizing the papers.

PUBLICITY & MEMBERSHIPS

BASIC INFORMATION

Members

Sachin Lodha (co-chair), Yogesh Simmhan (co-chair), Abhijat Vichare, Geetanjali Kale, Hemant Pande, Ponnurangam Kumaraguru, Shekhar Sahasrabudhe, Venkatesh Raman

Purpose of the committee

The purpose of the Publicity and Membership committee is to publicize activities of all ACM India committees and attract new memberships. This is done mainly using three avenues - websites, emails, and social media channels.

Sub-Committees of the Publicity Committee

1. Websites:
   a. Update appropriate websites with the latest information about awards, events, and all other activities of ACM India.
   b. Members: Yogesh Simmhan (chair), Hemant Pande (WPoets coordinator), Shekhar Sahasrabuddhe and Abhijat Vichare (budget management)
2. Emails:
   a. Send emails to relevant mailing lists to publicize about the updated web content on awards, events, and other activities of ACM India.
   b. Members: Hemant Pande (chair), Abhijat Vichare, Shekhar Sahasrabudhe, Venkatesh Raman
3. Social media:
   a. Promote ACM India activities on different social media platforms, namely, Facebook, Instagram, LinkedIn, Twitter/X and YouTube.
   b. Members: Sachin Lodha (chair), Geetanjali Kale, Hemant Pande, Ponnurangam Kumaraguru, Shekhar Sahasrabudhe (budget management)

PUBLICITY & MEMBERSHIPS: ACTIVITY HIGHLIGHTS

The ACM India website needs constant updating about various events, awards, and offerings that come up from time to time. This is being carried out by the Websites sub-committee in association with WPoets since May 2022. Emails to relevant mailing lists to publicize updated web content on awards, events, and other activities are managed by the Emails sub-committee. As the following example shows promoting ACM India activities on different social media platforms like Facebook, Twitter/X, Instagram, YouTube, and LinkedIn needs enhancement through targeted advertising. This is being explored by the Social Media sub-committee.

ACM India LinkedIn page has ~5.6K followers, with 1952 new followers who joined the last year. However, as can be seen in the analytics screenshot below, all these followers have joined organically, possibly through word of mouth or after attending an ACM India event, without any explicit promotion on part of the council. We wish to speed up more follower creation and reach out to a wider audience in LinkedIn as well as in other social media

platforms, namely, Facebook (724 followers), Instagram (1.3K followers), Twitter/X (2K followers) and YouTube (1K followers).
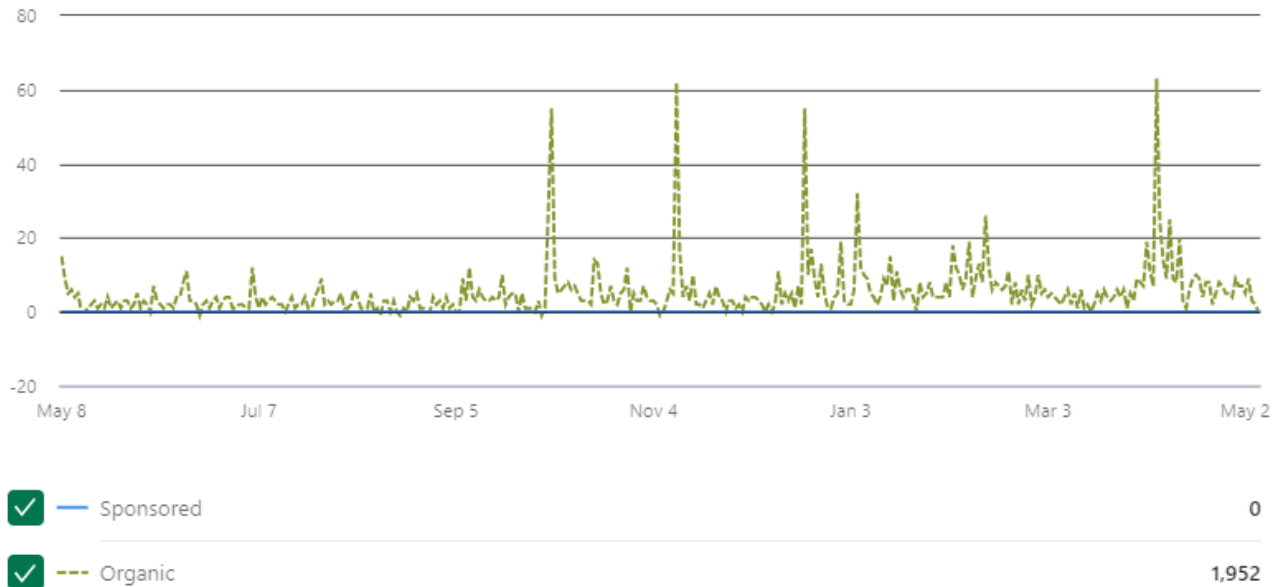
LinkedIn Followers

Follower highlights

5,655
Total followers

1,952
New followers in the last 365 days

Pages that post at least once a week see 5x more followers. Start a post

Follower metrics

Social Media	Feb 5, 2021	June 7, 2021	Oct 8, 2021	Feb 3, 2022	Oct 6, 2023	Mar 14, 2024	May 07, 2024
LinkedIn Followers	1162	1465	1957	2856	4529	5204	5655

Facebook Followers

Social Media	Feb 5, 2021	June 7, 2021	Oct 8, 2021	Feb 3, 2022	Oct 6, 2023	Mar 14, 2024	May 07, 2024
Facebook Followers	529	573	617	646	705	720	724

Insta Followers

Social Media	Feb 5, 2021	June 7, 2021	Oct 8, 2021	Feb 3, 2022	Oct 6, 2023	Mar 14, 2024	May 07, 2024
Instagram Followers	505	593	759	804	1104	1268	1311

Twitter/X Followers

Social Media	Feb 5, 2021	June 7, 2021	Oct 8, 2021	Feb 3, 2022	Oct 6, 2023	Mar 14, 2024	May 07, 2024
Twitter Followers	1308	1434	1589	1704	1849	1990	2042

YouTube Followers

Social Media	Feb 5, 2021	June 7, 2021	Oct 8, 2021	Feb 3, 2022	Oct 6, 2023	Mar 14, 2024	May 07, 2024
YouTube Subscribers	563	625	686	711	956	1020	1030

COMPUTING FOR SOCIETY

BASIC INFORMATION

Chair

R. Venkateswaran (Chair), Shweta Agrawal, Divy Thakkar, M. Balakrishnan (Active Members)

Purpose /Vision of the committee

Facilitate and recognize significant efforts in the domain of Computing for Society, with focus on

- Responsible and Ethical use of AI & Data
- Computing for Differently Abled people
- Supporting Sustainability through Green Software Development

COMPUTING FOR SOCIETY: ACTIVITY HIGHLIGHTS

Webinar on Sustainable Computing conducted jointly with IBM India Research on 04-Feb-2024, focusing on:

- Sustainable Infrastructure (Cloud, Data Center etc.)
- Learn and Adopt Best Practices in Software Development through Green Software Development.
- Speakers: Experts from Microsoft Research, IBM Research, TCS, Green Software Foundation and IISc Faculty.

COMPUTING FOR SOCIETY: DIVERSITY, EQUITY, & INCLUSION

Accessibility of Websites has been a Global focus. There are Global Accessibility Standards defined by Mozilla (and others), but many websites are not aligned or compliant with these standards. Towards this, we should focus on:

- Ensuring that ACM India's Website itself is compliant.
- Develop/Identify Tools/Frameworks/Libraries for Websites to be compliant.
- Ensure all ACM Chapter Websites are compliant (Awareness)
- Contest to identify "most compliant" ACM Chapter Website

COMMENTS/FUTURE PLANS

Responsible and Ethical use of AI & Data
- Personal Data Protection Bill (PDPB) of India. Build Awareness
- Influence AI Policy that is currently being developed.
- Partner with organizations such as AICTE to influence GoI / Ministries towards Skilling and Faculty Development.

Explore Partnership with organizations such as Microsoft, IBM, Green Software Foundation etc towards awareness and frameworks / SDKs for Green Software development.

ACM INDIA-W

BASIC INFORMATION

Chair

Rutvi Shah (Chair), Manik Gupta (Co-Chair), Geetanjali Kale (Secretary & Treasurer), Mini Ulanat, Sriparna Saha, Alpana Dubey, Bhavan Kanukurthi, Renuka Sindhgatta, Jayshree Mohan, Mukta Paliwal, Heena Timani (Past Chair), Meenakshi D'souza (ACM India Execom Representative).

Purpose /Vision of the committee

ACM India-W seeks to take forward the tasks of the ACM community, with a particular focus on the empowerment of women in computing in India.

ACM India-W aims to provide social and professional support for women in computing, and its proposed activities include:

1. Facilitate technical growth of women by organizing invited lectures, seminars, workshops and informal meetings
2. Provide a platform for the sharing of information, resources, ideas and experiences
3. Support women in their professional career growth and help them to face the challenges in their work environment
4. Encourage them to participate in computer-related studies and research

ACM India-W's goal would be also to promote computer literacy, particularly in rural India, with the objective of empowering underprivileged women and children, to enable them to be independent and self-reliant.

Sub-Committees, if any

a. **Standing Committee / Event Planning Committee**: (Two Committee Members per event)

The committee is responsible for coordinating with the host institute/organization for event planning, identifying and securing speakers/panellist, logistics, promotion and marketing, registrations and feedback management. Overall, the committee plays a crucial role in collaborating, organizing, and executing successful events ensuring they align with the ACM's goals and objectives and meet the needs of participants.

b. **Communication And Publicity Committee**:

- Geetanjali Kale (Chair),
- Rutvi Shah
- Manik Gupta,
- Jayashree Mohan

The committee is responsible for managing ACMI-W communication strategies and promoting its activities to the public. The committee will design and publish the ACM India-W Newsletter, manage social media handles of ACM India-W and to take care of the event updates in the ACM India-W website. The committee promotes the events through various channels, including social media, email, newsletters, blog posts and flyers. The committee will manage and update the ACMI-W's website to ensure it remains current, informative, and user-friendly. This may involve creating new pages, updating content, and optimizing for search engines.

c. **Sponsorship and Fundraising Committee:**

- Renuka Sindhgatta (Chair)
- Bhavana Kanukurthi

- Alpana Dubey

The committee is responsible for securing financial support through sponsorships, grants and donations to support ACMI-W's activities and initiatives. The committee is responsible for identifying potential sponsors, donors, and partners, cultivate relationships through personalized communication, meetings, prepare sponsorship proposals to solicit financial support. The committee will manage the sponsorship deliverables ensuring that sponsors receive the agreed-upon recognition, branding, and exposure.

d. **Outreach and Collaboration Committee**:

- Sriparna Saha (Chair)
- Alpana Dubey
- Mini Ulanat

The committee is responsible for establishing partnerships with universities, industry professionals, and other organizations to enhance participation and collaboration for ACMI-W events and initiatives.

e. **Student Chapter Engagement Committee/ Volunteer Management Committee / Buddy Project**:

- Mini Ulanat (Chair),
- Bhavana Kanukurthi

The committee is responsible for strengthening the ACMI-W professional / Student Chapter Tasks with recruiting and managing volunteers for the event.

ACM INDIA-W: ACTIVITY HIGHLIGHTS

1. **Indo-European ACM Celebration of Women in Computing: A Decade Celebration**

   The first Indo European ACM Celebration of Women in Computing: A Decade Celebration was virtually held on June 22, 2023. ACM-W Europe and ACM-W India are both having their 10th year anniversary and within this event, many great experiences and memories were shared with the participants.

   ACM-W Global Chair Ruth Lennon welcomed us with her encouraging speech. ACM-W India Chair Heena Timani and ACM-W Europe Chair Rukiye Altin shared the list of activities done in their regions. ACM-W India Treasurer Rutvi Shah chaired the first panel about chapter experiences. The second panel of the event was chaired by Dorota Filipczuk who is ACM-W Europe Vice Chair. The guests of our panel were the founders of both regions. Reyyan Ayfer, founder of ACM-W Europe and Arati Dixit, founder of ACM-W India, told us how the idea of starting regional ACM-W became alive.

ACMW Europe June Newsletter:

https://acmweurope.acm.org/newsletter-june-2023/#indo

2. ACMI-W Grad Cohort 2023

The ACM-W India Grad Cohort 2023 was organized by IISc (Indian Institute of Science) Bangalore on 7-8th July. The event had received enormous response by receiving 304 applications out of which selected 74 participants attended the event. Participants were from diverse institutions and geographies; there were research scholars from Hamirpur (Himachal Pradesh), Sikkim, Guwahati etc. The institutions they come from were also diverse – from top ranked institutes to aspiring institutes.

The event included presentations on a host of research areas, mentoring & brainstorming sessions, and networking opportunities. Participants were happy to learn and attend specially crafted sessions. The event received very positive feedback and reviews from the participants.

3. ACMI-W 8th National Level Hackathon 2023 (AthenaHacks)

The 8th edition of National Level ACMI-W Hackathon was hosted at PSG Institute of Engineering, Coimbatore on 24-25th November, 2023. The event received 272 applications, out of which 44 teams qualified for the second round. The top 10 teams were provided travel grant and free accommodation to participate in the final round held at PSG Coimbatore.

4. ACMI-W Lady Ada Programming Competition (A National Level Programming Competition)

ACM-W India in association with PICT ACM Student Chapter organized "Lady Ada Programming Contest" the flagship coding event exclusively for undergraduate and master's level female students. The initial two

rounds were conducted online, leading to an offline final round. The final round was hosted at the PICT ACM Student Chapter at the Pune Institute of Computer Technology.

The highlight of the Celebration of Women in Computing was the prize distribution ceremony for the Lady Ada Programming Contest, adding an exciting and competitive element. Anushka Allawadi emerged victorious, showcasing exceptional talent and skills.

5. **ACMI-W Celebration of Women in Computing (AICWiC 2023)**

The 'Celebration of Women in Computing' event by ACM-W on February 24th, 2024 was hosted by the Pune Institute of Computer Technology. The event proved to be an amazing platform for sharing insights and expanding network. The event included keynote sessions, panel discussions, networking opportunities and various other exciting activities.

6. **ACMI-W Annual Summit for Women in Computing**

8th February, 2024

Every year, ACMI-W celebrates the remarkable achievements and contributions of women in the computing field. The ACMI-W Annual Summit served as a platform for acknowledging the significant talent and potential of women in computing, offering

participants the opportunity to engage with experienced researchers from academia and industry worldwide, thereby facilitating the career growth of women in this field.

The summit began with a welcome note by **Rutvi Shah**, ACMI-W Chair. She introduced the ACMI-W initiatives and activities that are organized under the ACMI-W umbrella. She encouraged the participants to actively participate in the ACMI-W activities to improve their skills and confidence through interactions and networking and thereby enhance their professional growth.

The first highlight of the summit was the panel discussion titled "**Navigating the Leadership Labyrinth: Strategies and Stories**," which provided a thorough exploration of the role of collaboration and confidence in women's leadership. The panel offered valuable insights and actionable advice to attendees, featuring a diverse mix of industry and academia leaders from across the country. The presence of **Prof. Ruth Lennon**, the ACM-W Chair, added further value to the event.

The most exciting and awaited part of the summit was the keynote address by **Nutan Limaye**, the recipient of the "Outstanding Contribution in Computing by a Woman (OCCW) award".

ACM INDIA-W: DIVERSITY, EQUITY, & INCLUSION

The committee consists of 10 members representing diverse geographical locations in India, including Tamil Nadu, Hyderabad, Pune, Ahmedabad, Nagpur, and Patna. Out of these members, 6 come from academia while 4 represent industries, ensuring a well-maintained balance between the two sectors.

Looking ahead, we plan to enhance representation from all the regions of India in the committee. We aim to include more young women (undergraduate, postgraduate, and PhD students) from local chapters who have actively contributed to their ACM India-W student chapters. These individuals will be welcomed as volunteers in the council.

COMMENTS/FUTURE PLANS

ACMI-W plans to launch various initiatives aimed to empower women in computing, enhance global collaboration, and promote the interdisciplinary nature of computing, fostering innovation and inclusivity in the field.

1. **Mentor-Mentee program:** The ACM India Women Mentor-Mentee Program provides a platform for experienced professionals to mentor aspiring women in the computing field. Mentors offer guidance, support, and advice to mentees as they navigate their careers and academic pursuits. Through one-on-one interactions, mentees gain valuable insights, skills, and networking opportunities that help them advance in their careers.

2. **Global Collaboration through Buddy System:** Introduce a buddy system that fosters collaboration and knowledge sharing among ACM India-W student chapters across various cities, regions, states, and countries.

This initiative aims to connect students from different backgrounds and geographical locations, enabling them to exchange ideas, collaborate on projects, and provide mutual support.

3. **Global Chapter Summit:** ACMI-W is thrilled to announce the upcoming Global Chapter Summit, bringing together ACM student chapters from around the world. This summit will serve as a platform for chapters to share experiences, ideas, and best practices. Participants will be able to connect, learn, and inspire each other to make a positive impact in the global computing community.

LIST OF ALL COMMITTEE MEMBERS

- Venkatesh Raman   vraman@imsc.res.in
- Supratik Chakraborty   supratik@cse.iitb.ac.in
- Meenakshi D'Souza   meenakshi@iiitb.ac.in
- Hemant Pande   hemant_pande@india.acm.org
- Shekhar Sahasrabudhe   shekhar_sahasrabudhe@india.acm.org
- Rajeev Shorey   rajeevshorey@gmail.com
- Ranjita Bhagwan   rbhagwan@google.com
- Yogesh Simmhan   simmhan@iisc.ac.in
- Shweta Agrawal   shweta@cse.iitm.ac.in
- Jayant Haritsa   haritsa@iisc.ac.in
- Viraj Kumar   viraj@iisc.ac.in
- Ponnurangan Kumaraguru   pk.guru@iiit.ac.in
- Sachin Lodha   sachin.lodha@tcs.com
- Sudip Misra   sudipm@iitkgp.ac.in
- R. Venkateswaran   venkateswaranr@gmail.com
- Rutvi Shah   rutvirshah@gmail.com
- Tejaswini Apte   apte.tejaswini@gmail.com
- Chitra Babu   chitsbabu@gmail.com
- M Balakrishnan   mbala28@gmail.com
- Aritra Banik   aritra@niser.ac.in
- Aswani Kumar Cherukuri   aswani@vit.ac.in
- Anand Deshpande   anand@persistent.com
- Kiran Deshpande   kirand17@gmail.com
- Alpana Dubey   alpana.a.dubey@accenture.com
- Tilottama Goswami   goswami.tilottama@gmail.com
- Manik Gupta   manik@hyderabad.bits-pilani.ac.in
- Neelima Gupta   ngupta.cs.du@gmail.com
- Pankaj Jalote   jalote@iiitd.ac.in
- Navin Kabra   navin@smriti.com
- Geetanjali Kale   gvkale@gmail.com
- Venkatesh Kamat   vvkamat@iitgoa.ac.in
- Bhavana Kanukurthi   bhavana@iisc.ac.in
- Hemangee Kapoor   hemangee@iitg.ac.in
- Neha Karanjkar   nehak@iitgoa.ac.in

- Uday Khedker   uday@cse.iitb.ac.in
- Bipin Mehta   bv.mehta@outlook.com
- Jayshree Mohan   jamohan@microsoft.com
- Ravindra Naik   rd.naik@tcs.com
- Prashant Nair   prashant@amrita.edu
- P J Narayanan   pjn@iiit.ac.in
- Mukta Paliwal   paliwalmukta@gmail.com
- Nitin Patil   nitindocs@gmail.com
- Ranga Rajagopal   rangagopal1@gmail.com
- R. Ramanujam   jam@imsc.res.in
- Abhiram Ranade   ranadeag@gmail.com
- B. Ravindran   ravi@cse.iitm.ac.in
- Sriparna Saha   sriparna@iitp.ac.in
- Saket Saurabh   saket@imsc.res.in
- Vipul Shah   vipul.x.shah@gmail.com
- Akhilesh Kumar Sharma   akhileshkumar.sharma@jaipur.manipal.edu
- Rajnish Sharma   rajnish.sharma@chitkara.edu.in
- Renuka Sindhgatta Rajan Renuka.Sindhgatta.Rajan@ibm.com
- Kaarthik Sivakumar   kaarthik.sk@gmail.com
- Heena Timani   heenaltimani@gmail.com
- Mini Ulanat   mini_u@cusat.ac.in
- R. Venkatesh   r.venky@tcs.com
- Abhijat Vichare   abhijatv@india.acm.org

Association for Computing Machinery
C/O Persistent Systems Ltd
"Pingala - Aryabhata"
Plot No 9A/12, CTS No.12A/12,
Erandawana, Pune 411004