



AIML V2H2S2: Session on Computer Vision
14 October 2020: 8:00 to 11:00 PM IST

MEETING LINK: [Click here to join as attendee](#)

SCHEDULE (all times in PM IST)

Time	Event	Panelists
8:00	Welcome, list all participants, outline purpose of meeting, nature of discussions, nature of outputs	C V Jawahar Vineeth N Balasubramanian
8:05	Subsession 1 (Panel Discussion) Theme: How can computer vision help India, and how can India help computer vision? More details...	Moderator: Santanu Chaudhury Lead Speakers: Ramesh Raskar, Bhabatosh Chanda, Venu Govindaraju, Chetan Arora, Pulkit Agarwal Discussions: All
8:55	SHORT BREAK	
9:05	Subsession 2 (Panel Discussion) Theme: What kinds of technical challenges in computer vision can be taken up collaboratively by Indian and NRI/international researchers? More details...	Moderator: Amit Roy-Chowdhury Lead Speakers: Venkatesh Babu, Karteek Alahari, Parag Chaudhuri, Dinesh Jayaraman, Vinay Namboodiri Discussions: All
9:55	SHORT BREAK	
10:05	Subsession 3 (Panel Discussion) Theme: What specific models of engagement (short-term and long-term) do we need to develop for close collaborations between Indian and NRI/international researchers? More details...	Moderator: P J Narayanan Lead Speakers: Narendra Ahuja, Subhashis Chaudhuri, Rama Chellappa, Uma Mudenagudi, Mohan Kankanahalli Discussions: All
10:55	Closing: Discussion of next steps, Action items; and Thank you	C V Jawahar Vineeth N Balasubramanian

Rapporteur: Joseph K J

OUR PANELISTS

Ramesh Raskar, MIT, USA	Santanu Chaudhury, IIT-Jodhpur
Venu Govindaraju, SUNY Buffalo, USA	Bhabatosh Chanda, ISI-Kolkata
Pulkit Agarwal, MIT, USA	Chetan Arora, IIT-Delhi
Amit Roy-Chowdhury, UC Riverside, USA	Venkatesh Babu, IISc
Karteek Alahari, INRIA, France	Parag Chaudhuri, IIT-Bombay
Dinesh Jayaraman, U Penn, USA	P J Narayanan, IIIT-Hyderabad
Vinay Namboodiri, Univ of Bath, UK	Subhashis Chaudhuri, IIT-Bombay
Narendra Ahuja, UIUC, USA	Uma Mudenagudi, KLE Univ
Rama Chellappa, Johns Hopkins Univ, USA	C V Jawahar, IIIT-Hyderabad
Mohan Kankanahalli, NUS, Singapore	Vineeth N Balasubramanian, IIT-Hyderabad

Subsession 1: 8:05 - 8:55 pm IST

Theme: How can computer vision help India, and how can India help computer vision?

Abstract: Computer vision technologies have matured from occupying a niche market segment in the industry to being a mainstream technology across several application domains today. Existing R&D efforts in computer vision (e.g. autonomous navigation) largely focus on problems and challenges that have arisen in the context of developed countries. The objective of this subsession is to discuss what problems and challenges of the Indian context that computer vision can help solve. The efforts in this direction (and hence the discussion) could be two-pronged: (i) existing vision algorithms and models that can be adapted to the Indian context, and built into working systems; and (ii) new research required to develop vision algorithms and models to address challenges in the Indian context. Needless to say, such efforts will also contribute to addressing the challenges of the proverbial “next billion” in developing and underdeveloped countries around the world. Complementarily, India has unique strengths in terms of human resources, diversity, complexity of “in-the-wild” challenges, capability to generate data, annotation capabilities, and a growing entrepreneurship ecosystem. How can we leverage these strengths to support computer vision R&D in India, as well as globally?

What problems in India across application domains can computer vision research address? What are unique strengths of India that can be leveraged for computer vision research globally?

Moderator: Santanu Chaudhury

Lead Speakers: Ramesh Raskar, Bhabatosh Chanda, Venu Govindaraju, Chetan Arora, Pulkit Agarwal

Subsession 2: 9:05 - 9:55 pm IST

Theme: What kinds of technical challenges in computer vision can be taken up collaboratively by Indian and NRI/international researchers?

Abstract: R&D in computer vision has gradually evolved over the last few years into identifying certain key ongoing challenges such as learning with limited supervision, explainability and fairness, privacy-preserving systems, adversarial robustness, etc. What sample problems could collaborative projects between Indian and NRI/international researchers address? How can we leverage the expertise gained by research groups worldwide to collect (and annotate) benchmark datasets in the Indian context quickly? What challenges can be jointly organized by such collaborative efforts in top-tier venues? Are there specific focus areas that naturally bring together complementarity of available expertise and funding priorities of India and other countries? What unique technical opportunities exist? Are there ongoing research efforts of NRI/international researchers in computer vision, whose impact will get magnified by bringing an Indian context to the problem?

Moderator: Amit Roy-Chowdhury

Lead Speakers: Venkatesh Babu, Karteek Alahari, Parag Chaudhuri, Dinesh Jayaraman, Vinay Namboodiri

Subsession 3: 10:05 - 10:55 pm IST

Theme: What specific models of engagement (short-term and long-term) do we need to develop for close collaborations between Indian and NRI/international researchers?

Abstract: The success of any discussion on collaborative efforts between Indian and international researchers in computer vision (and any other related area) depends on the formal and informal mechanisms that are provided to enable and facilitate interactions and engagements, both in the short-term and long-term future. Existing collaborations largely rely on informal engagements through known connections, students/alumni, and meetings at conferences. What can be done (or what incentives can be provided) to promote a culture of exploring and exploiting international collaborations amid researchers in India? What formal mechanisms - that are attractive to international and Indian researchers alike - can be established at the national level, University or even individual level (e.g. an India workshop at CVPR?) to promote such collaborations? What can we learn from China's example in incentivizing its diaspora to participate in their own national research initiatives? What could be the potential roadblocks for institutions and organizations in India to adapt to such collaborations, or operational models? How can such roadblocks be overcome? What formal schemes do we need to have in place for easy exchange of faculty, students, entrepreneurs between India and international groups?

Moderator: P J Narayanan

Lead Speakers: Narendra Ahuja, Subhashis Chaudhuri, Rama Chellappa, Uma Mudenagudi, Mohan Kankanahalli
