Curriculum Vitae

Sahana Murthy

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Education

Ph.D., Physics. Rutgers University.	May 2004
M.Sc., Physics. Indian Institute of Technology Bombay.	June 1997
B.Sc., Physics. University of Mumbai.	June 1995

Professional Experience

Associate Professor	Inter-Disciplinary Programme in Educational Technology, Indian Institute of Technology Bombay	September 2014 - date
Assistant Professor	Inter-Disciplinary Programme in Educational Technology, Indian Institute of Technology Bombay	March 2009 - date
Lecturer	Experimental Study Group, Massachusetts Institute of Technology	September 2006 - January 2009
Post-doctoral Associate	Center for Educational Computing Initiatives, Massachusetts Institute of Technology	September 2005 - August 2006.
Post-doctoral Associate	Physics Education Research group, Rutgers University	November 2003 - August 2005.

Ph. D students guiding

5 as sole guide (2 in 5th year, 1 each in 4th, 3rd and 2nd year)
2 as co-guide (1 in 4th year, 1 in 2nd year)

Courses taught

IIT Bombay:

- Introduction to educational technology (PhD core course)
- Research methods in educational technology (PhD elective)
- Electricity and magnetism (1st year core course)

MIT:

- Mechanics (Physics 1st year course)
- Electricity and magnetism (Physics 1st year course)
- How learning changes the brain (Project-based course)

Publications

Peer-reviewed journals

1. Gargi Banerjee, Sahana Murthy and Sridhar Iyer. Effect of active learning using program visualization in technology constrained college classrooms. *Research and Practice in Technology Enhanced Learning*, vol. 10(1), pp. 1-25
2. Sahana Murthy, Sridhar Iyer and Jayakrishnan Warriem. ET4ET: A large-scale professional development program on effective integration of Educational Technology for engineering faculty. *Educational Technology & Society,* vol. 18(3), pp. 16-28.
3. Mrinal Patwardhan and Sahana Murthy. When does higher degree of interaction lead to higher learning in visualizations? Exploring the role of 'Interactivity Enriching Features'. *Computers & Education,* vol. 82, pp. 292-305, 2015.
4. Ramkumar Rajendran, Sridhar Iyer, Sahana Murthy, Campbell Wilson and Judithe Sheard. A theory-driven approach to predict frustration in an ITS. *IEEE Transactions on Learning Technologies*, **6** (4), pp. 378-388, 2013.
5. Sameer Sahasrabudhe, Sahana Murthy and Sridhar Iyer. Design based research to create instructional design templates for learning objects. New Frontiers in Education, vol.46(1), pp.27-46, Jan-Mar 2013.
6. Sameer Sahasrabudhe, Sahana Murthy and Sridhar Iyer. Applying traditional animation principles for creating learning objects. New Frontiers in Education, vol.45(2), pp.81-99, Apr-June 2012.
7. A. Kenkre and S. Murthy. Design and evaluation of OSCAR physics learning objects. Journal of Research: The Bede Athenaeum 3 (1), 6-10, 2012.
8. E. Etkina, A. Karelina, S. Murthy and M. Ruibal-Villasenor. Using action research to improve learning and formative assessment to conduct research. *Physical Review Special Topics, Physics Education Research*, **5**, 010109, 2009.
9. E. Etkina, A. Van Heuvelen, S. White-Brahmia, D. Brookes, M. Gentile, S. Murthy, D. Rosengrant, and A. Warren. Scientific abilities and their assessment. *Physical Review Special Topics, Physics Education Research,* **2**, 020103, 2006.
10. Eugenia Etkina, Sahana Murthy and Xueli Zou. Using introductory labs to engage students in experimental design. *American Journal of Physics*, **74**, 979, 2006.
11. G. Kotliar, S. Murthy and M. J. Rozenberg. Compressibility divergence and the finite temperature Mott transition. *Physical Review Letters*, **89**, 046401, 2002.
12. C. Y. Kadolkar, N. Goveas, D. K. Ghosh and S. Murthy. Haldane Gap in S=2 XXZ quantum anti-ferromagnet. *Journal of magnetism and magnetic materials*, **177-181**, Part 1, 638, 1998.

Invited

1. Physics Education Research in the Laboratory Setting. Physics News: Bulletin of Indian Physics Association, Special Issue on Physics Education Research. Guest Editor Arvind Kumar. No. 4, Vol. 41, 20-32, October 2011.

Book Chapter

Sahana Murthy, Jayakrishnan Warriem and Sridhar Iyer. Technology integration for student-centred learning: Model for teacher professional development program on effective integration of educational technology. *To appear in* Scholarship of Learning and Teaching (SoLT), Springer, 2016.

International peer-reviewed conference proceedings

1. Aditi Kothiyal, Sahana Murthy and Sanjay Chandrasekharan. "Hearts Pump and Hearts Beat": Engineering Estimation as a form of model-based reasoning. 12th International Conference of the Learning Sciences, ICLS 2016, Singapore. June 20-24, 2016.
2. Anurag Deep, Sahana Murthy and P. J. Bhat. Designing a Technology Enhanced Learning environment for Hypothetico---Deductive Reasoning in Genetics". 6th International conference to review research on Science, Technology and Mathematics Education (epiSTEME 6), Mumbai, India, December 15-18, 2015.
3. Vasanta Akondy and Sahana Murthy. From Novice to Expert Instructional Designer: A Training Based on Cognitive Apprenticeship Model. Proceedings of the 7th IEEE International Conference on Technology for Education (T4E 2015), Warangal, India, December 10-12, 2015.
4. Mrinal Patwardhan and Sahana Murthy. How Reciprocative Dynamic Linking Supports Learners' Representational Competence: An Exploratory Study. 23rd International Conference on Computers in Education, (ICCE 2015), Hangzhou, China. November 30- December 4, 2015.
5. Jayakrishnan M Warriem, Sahana Murthy and Sridhar Iyer. Sustainability at Scale: Evidence from a Large Scale Teacher Professional Development Program. 23rd International Conference on Computers in Education, (ICCE 2015), Hangzhou, China. November 30- December 4, 2015.
6. Gargi Banerjee and Sahana Murthy. CuVIS Tool to Develop Instructors' Competency in Creating Meaningful Learning Designs. 23rd International Conference on Computers in Education, (ICCE 2015), Hangzhou, China. November 30- December 4, 2015.
7. Aditi Kothiyal and Sahana Murthy. Exploring Student Difficulties in Divide and Conquer Skill with a Mapping Tool. Workshop on Technology Enhanced Learning on Thinking Skills (TELoTS), at the 23rd International Conference on Computers in Education, (ICCE 2015), Hangzhou, China. November 30- December 4, 2015.
8. Madhuri Mavinkurve and Sahana Murthy. Design of TEL environment to develop Multiple Representation thinking skill. Workshop on Technology Enhanced Learning on Thinking Skills (TELoTS), at the 23rd International Conference on Computers in Education, (ICCE 2015), Hangzhou, China. November 30- December 4, 2015.
9. Madhuri Mavinkurve and Sahana Murthy. Development of engineering design competencies using TELE-EDesC: Do the competencies transfer? IEEE 15th International Conference on Advanced Learning Technologies (ICALT 2015), Hualein, Taiwan, July 7-9, 2015.
10. Aditi Kothiyal, Bipin Rajendran and Sahana Murthy. Delayed Guidance: A teaching-learning strategy to develop ill-structured problem solving skills in engineering. 3rd International Conference on Learning and Teaching in Computing and Engineering (LaTiCE 2015), Taipei, Taiwan. April 9-12, 2015.
11. Deepti Reddy, Shitanshu Mishra, Ganesh Ramakrishnan and Sahana Murthy. Thinking, Pairing, and Sharing to improve learning and engagement in a Data Structures and Algorithms (DSA) class. 3rd International Conference on Learning and Teaching in Computing and Engineering (LaTiCE 2015), Taipei, Taiwan. April 9-12, 2015.
12. Anura Kenkre and Sahana Murthy. A Self Study Learning Environment for Modeling Abilities: Do all learners take the same learning path? Proceedings of the 6th IEEE International Conference on Technology for Education (T4E 2014) Kollam, India, December 18-21, 2014.

13. Abhinav Anand, Aditi Kothiyal, Bipin Rajendran and Sahana Murthy. Guided Problem Solving and Group Programming: A Technology-Enhanced Teaching-Learning Strategy for Engineering Problem Solving. Proceedings of the 6th IEEE International Conference on Technology for Education (T4E 2014) Kollam, India, December 18-21, 2014.
14. Rwitajit Majumdar, Aditi Kothiyal, Prajakt Pande, Harshit Agarwal, Ajith Ranka, Sahana Murthy and Sanjay Chandrasekharan. The enactive equation: exploring how multiple external representations are integrated, using a fully controllable interface and eye-tracking. Proceedings of the 6th IEEE International Conference on Technology for Education (T4E 2014) Kollam, India, December 18-21, 2014.
15. Gargi Banerjee, Mrinal Patwardhan and Sahana Murthy. Learning Design Framework for Constructive Strategic Alignment with Computer-based Visualizations. 22nd International Conference on Computers in Education, (ICCE 2014), Nara, Japan. November 30- December 4, 2014.
16. Jayakrishnan M. Warriem, Sahana Murthy and Sridhar Iyer. A2I: A Model for Teacher Training in Constructive Alignment for Use of ICT in Engineering Education. 22nd International Conference on Computers in Education, (ICCE 2014), Nara, Japan. November 30- December 4, 2014.
17. Anura Kenkre, Sahana Murthy and Madhuri Mavinkurve. Development of Predict-Test-Revise Modeling Abilities via a self-study Learning Environment. 22nd International Conference on Computers in Education, (ICCE 2014), Nara, Japan. November 30- December 4, 2014.
18. Madhuri Mavinkurve and Sahana Murthy. Self-assessment rubrics as metacognitive scaffolds to improve design thinking. Workshop on 'Technology Enhanced Learning of Thinking Skills', in the Proceedings of the 22nd International Conference on Computers in Education. Japan: Asia-Pacific Society for Computers in Education.
19. Aditi Kothiyal, Sahana Murthy and Sridhar Iyer. Think-Pair-Share in a large CS1 class: Does learning really happen? Proceedings of the 19th Annual ACM SIGCSE conference on Innovation and Technology in Computer Science Education (ITiCSE 2014), Uppsala, Sweden, June 23-25, 2014.
20. Shitanshu Mishra, Sridhar Iyer and Sahana Murthy. Effect of a 2-week Scratch Intervention in CS1 on learners with varying prior knowledge. Proceedings of the 19th Annual ACM SIGCSE conference on Innovation and Technology in Computer Science Education (ITiCSE 2014), Uppsala, Sweden, June 23-25, 2014.
21. Jayakrishnan M. Warriem, Sahana Murthy and Sridhar Iyer. Training in-service teachers to do action research in educational technology. Proceedings of the 5th IEEE International Conference on Technology for Education (T4E 2013) Kharagpur, India, December 18-20, 2013.
22. Sahana Murthy and Sridhar Iyer. Guidelines and Templates for Planning, Conducting and Reporting Educational Technology Research (Tutorial). Proceedings of the 5th IEEE International Conference on Technology for Education (T4E 2013) Kharagpur, India, December 18-20, 2013.
23. Madhuri Mavinkurve and Sahana Murthy. "Comparing self-learning behavior of low and high scorers in computer based visualization for engineering design competencies". 21st International Conference on Computers in Education, (ICCE 2013), Bali, Indonesia. November 18-22, 2013.
24. Gargi Banerjee, Sahana Murthy and Sridhar Iyer. (2013),"Program visualization: Effect of viewing vs. responding on student learning". 21st International Conference on Computers in Education, (ICCE 2013), Bali, Indonesia. November 18-22, 2013.

25. Jayakrishnan M. Warriem, Sahana Murthy and Sridhar Iyer. "A model for active learning in synchronous remote classrooms: Evidence from a large-scale implementation". In 21st International Conference on Computers in Education, (ICCE 2013), Bali, Indonesia. November 18-22, 2013.
26. A. Kothiyal, R. Majumdar, S. Murthy and S. Iyer. "Effect of Think-Pair-Share in a large CS1 class: 83% sustained engagement", Proceedings of the ACM Ninth International Computing Education Research Workshop, (ICER 2013), San Diego, USA, August 12-14, 2013.
27. Sridhar Iyer and Sahana Murthy. "Demystifying networking: teaching non-majors via analogical problem-solving". ACM Symposium on Computer Science Education (SIGCSE 2013), Denver, USA, March 2013.
28. Sameer Sahasrabudhe, Sahana Murthy and Sridhar Iyer. "Embedding visual communication principles in Instructional Design phase of Learning Object creation process". World Conference on Education and Multimedia (ED-MEDIA 2012), Denver, USA, March 2012.
29. M. Mavinkurve and S. Murthy. "Interactive visualizations to teach design skills". Workshop on 'Computer-Supported Visualization, Modeling, and Simulation for Learning' in the 20th International Conference on Computers in Education (ICCE 2012), Singapore, November 26-30, 2012.
30. G. Banerjee and S. Murthy. "Effect of instructors' pedagogy and TPACK on intergration of computer based visualizations". Workshop on 'Computer-Supported Visualization, Modeling, and Simulation for Learning' in the 20th International Conference on Computers in Education (ICCE 2012), Singapore, November 26-30, 2012.
31. A. Kenkre, G. Banerjee, M. Mavinkurve and S. Murthy. "Identifying Learning Object Pedagogical Features to Decide Instructional Setting." Proceedings of the 4th IEEE International Conference on Technology for Education (T4E 2012), Hyderabad, India, July 18-20, 2012.
32. A. Diwakar, M. Patwardhan and S. Murthy. "Pedagogical Analysis of Content Authoring Tools for Engineering Curriculum." Proceedings of the 4th IEEE International Conference on Technology for Education (T4E 2012), Hyderabad, India, July 18-20, 2012.
33. R. Rajendran, S. Iyer and S. Murthy. "Literature Driven Method for Modeling Frustration in an ITS". IEEE 12th International Conference on Advanced Learning Technologies (ICALT), Rome, Italy, July 4-6, 2012.
34. M. Patwardhan and S. Murthy. "Teaching-learning with interactive visualization: How to choose the appropriate level?" IEEE International Conference on Technology Enhanced Education (ICTEE 2012), Amritapuri, India, January 3-5, 2012.
35. M. Mavinkurve and S. Murthy. "Visualisation to enhance students' engineering design ability." IEEE International Conference on Technology Enhanced Education (ICTEE 2012), Amritapuri, India, January 3-5, 2012.
36. Gargi Banerjee and Sahana Murthy. "Model for large scale development of learning objects." Proceedings of the 3rd IEEE International Conference on Technology for Education (T4E 2011), Chennai, India. July 14-16, 2011.
37. Madhulika Goyal and Sahana Murthy. "Probing students' affective domain in an ICT-enriched course." Proceedings of epiSTEME-4, Homi Bhabha Centre for Science Education, Mumbai, January 2011.
38. Usha Viswanathan and Sahana Murthy. "Raising students' cognitive levels, extending level of

textbook questions: Can we do both?" Proceedings of epiSTEME-4, Homi Bhabha Centre for Science Education, Mumbai, January 2011.

39. Sahana Murthy, Rohit Gujrati and Sridhar Iyer. "Using System Dynamics to Model and Analyze a Distance Education Program." International Conference on Information and Communication Technologies and Development (ICTD) 2010, London, UK. December 2010.
40. Divya Tiwari, Richa Sehgal, Jayant Bansal and Sahana Murthy. "Clicking away the distance from education." Proceedings of the 2nd IEEE International Conference on Technology for Education 2010 (T4E 2010), Mumbai, July 2010.
41. Madhulika Goyal and Sahana Murthy. "Student perceptions in the use of new technologies in engineering courses." Proceedings of the International Workshop on Technology for Education 2009 (T4E 2009), Bangalore, August 2009.
42. Sahana Murthy. "Peer-assessment of homework using rubrics." AIP Proceedings of the 2007 Physics Education Research Conference, Greensboro, NC. July 2007.
43. Eugenia Etkina, David T Brookes, Sahana Murthy, Anna Karelina, Maria Ruibal Villasenhor, Alan Van Heuvelen. Developing and assessing student scientific abilities. STEM Assessment Conference, October 2006.
44. Eugenia Etkina and Sahana Murthy. Taking First Steps to Understand Transfer of Scientific Abilities. National Association of Research in Science Teaching, Conference Proceedings (NARST), San Francisco, CA. April 2006.
45. Eugenia Etkina and Sahana Murthy. "Design labs: student expectations and reality." AIP Proceedings of the 2005 Physics Education Research Conference, Salt Lake City, UT. August 2006.
46. Sahana Murthy and Eugenia Etkina. "Using experimental design problems to help students in a large enrollment class develop scientific abilities." National Association of Research in Science Teaching, Conference Proceedings (NARST), Dallas, TX. August 2005.
47. Sahana Murthy and Eugenia Etkina. "Development of scientific abilities in a large class." AIP Proceedings of the 2004 Physics Education Research Conference, Sacramento, CA. August 2004.

Specifications and Technical Reports

1. Sahana Murthy and Sridhar Iyer. Guidelines and Templates for Planning, Conducting and Reporting Educational Technology Research. Technical Report *(TR-ET-2013-01),* Inter-Disciplinary Program in Educational Technology, IIT Bombay, Dec 2013.
2. Sridhar Iyer, Farida Khan, Sahana Murthy, Vijayalakshmi Chitta, Malathy Baru and Usha Vishwanathan. CMC: A Model Computer Science Curriculum for K-12 Schools. Technical Report *(TR-CSE-2013-52),* Dept of Computer Science and Engg,, IIT Bombay, June 2013.

Editor of conference proceedings

1. Proceedings of T4E 2014, the 6th IEEE international conference on Technology for Education, Amritapuri, India, December 18-21, 2014. Indexed in IEEE XPlore.
2. Proceedings of T4E 2012, the 4nd IEEE international conference on Technology for Education, Hyderabad, India, July 18-20, 2012. Indexed in IEEE XPlore.
3. Proceedings of T4E 2010, the 2nd IEEE international conference on Technology for Education, Mumbai, India, July 1-2 2010. Indexed in IEEE XPlore.

Workshops and Continuing Education Program courses

- Educational Technology for Engineering Teachers. 8-week MOOC on IITBx platform, January 7 – March 7, 2016. (5000+ participants). *Jointly with Jayakrishnan Warriem and Sridhar Iyer.*
- Effective Teaching-Learning using Visualizations at the 7th IEEE International Conference on Technology for Education T4E2015, Warangal. December 9, 2015. *Jointly with Sridhar Iyer*
- 2nd Workshop on 'Technology enhanced learning of thinking skills', at the International Conference on Computers in Education, ICCE 2015, Hangzhou, China. Nov. 30- Dec. 3, 2015. *Jointly with Mavinkurve and Sridhar Iyer*
- MEET Workshop – Mentoring educators in educational technology, IIT Bombay. Oct 23-25, 2015. *Jointly with Jayakrishnan Warriem, Rwitajit Majumdar and Sridhar Iyer*
- Planning, Conducting and Reporting Educational Technology Research – half-day workshop in University of Goa. October 11, 2015.
- Creating your elevator pitch. Session in T10KT workshop on Technical Communication for Scientists and Engineers, IIT Bombay. August 2015.
- Pedagogy for effective use of educational technology in engineering education. 2-week equivalent workshop under Teach 10000 Teachers project, January 5-31, 2015. (4700 participants). *Jointly with Jayakrishnan Warriem and Sridhar Iyer*.
- Pedagogy for effective use of educational technology in engineering education. 1-week TEQIP workshop, IIT Bombay. January 5-9, 2015. *Jointly with Jayakrishnan Warriem and Sridhar Iyer.*
- How to get your paper accepted for T4E2015". Tutorial at the IEEE International Conference in Technology for Education, T4E 2014, Amrita University, Kerala. December 21, 2014. *Jointly with Sridhar Iyer.*
- Technology enhanced learning of thinking skills. Workshop at the International Conference on Computers in Education, ICCE 2014, Nara, Japan, Nov. 30- Dec. 3, 2014. *Jointly with Mrinal Patwardhan and Sridhar Iyer.*
- From teaching to research on teaching: The process of Action Research. Workshop in e-Seminar on Steps to Research, Amal Jyothi College of Engineering, Kerala. Sept. 20, 2014.
- Pedagogy for effective use of educational technology in engineering education. 2-week equivalent workshop, Quality Enhancement in Engineering Education June-July 2014. (3400 participants). *Jointly with Jayakrishnan Warriem and Sridhar Iyer.*
- Peer-Instruction: An interactive learning strategy. How to promote student conceptual understanding in your course. IDP-ET workshop series. February 27, 2014.
- Conducting ET research in your classroom or lab. Half-day interactive e-workshop, FISAT, Kerala. February 8, 2014. *Jointly with Jayakrishnan Warriem.*
- Effective teaching-learning strategies from Physics Education Research. 2 sessions in UGC Refresher course for B.Sc physics instructors. Mumbai University. Nov. 13-14, 2013.
- Effective Teaching and Learning: How can Educational Technology help? 2 sessions. In-house CEP course for Babasaheb Ambedkar Technological University. Sept. 4, 2013.
- Effective Teaching-Learning Strategies for Quality Engineering Education. Co-instructor for 1 week QIP course for engineering college instructors. June 24-28, 2013. *Jointly with Sridhar Iyer, Madhuri Mavinkurve, Mrinal Patwardhan, Rekha Ramesh and Anita Diwakar.*

- Effective Teaching and Assessment: How can Educational Technology help? 2 sessions. In-house CEP course for Institute of Chemical Technology, Mumbai. Feb. 4, 2013.
- Research in educational technology. 1 week T10KT workshop, February 2-9 2013. 4000+ participants. *Jointly with Sridhar Iyer*
- Effective Teaching and Assessment. 1-day CEP course for NMIMS, Mumbai. March 15, 2012.
- Writing effective conference papers. Instructor for 2-day T10KT course. February 18-19, 2012.
- Instructional design workshop for learning objects. Organized as part of Project OSCAR. IIT Bombay. May 2, 2011. *Jointly with Sameer Sahasrabudhe, Gargi Banerjee and Anura Kenkre.*
- Effective teaching-learning strategies in Physics: Research-based approaches. 2 sessions in UGC Refresher course for physics instructors. Mumbai University. Jan. 31 and Feb. 4, 2011.
- Instructional design workshop for learning objects. Organized as part of Project OSCAR, NMIMS. January 29 and February 5, 2011. *Jointly with Sameer Sahasrabudhe and Gargi Banerjee.*

Invited Talks

- Active learning strategies for improving student learning and engagement. Invited talk in seminar on 'Conversations Across Disciplines – Teaching & Learning', IIT Gandhinagar. February 13, 2016.
- Active learning strategies for improving student learning and engagement. Colloquium in Department of Electrical Engineering, IIT Bombay. November 4, 2015.
- Learning from digital technologies – cognitive aspects. Invited guest lecture at Tata Institute of Social Sciences, (MA in Education course), TISS, Mumbai. May 21, 2015.
- Peer-Instruction: An interactive learning strategy to promote student conceptual understanding. Session in Symposium on teaching-learning in higher education, IIT Madras. May 28, 2014.
- Computer-based visualizations in facilitating learning: Some myths and realities. Invited talk at the National Symposium on Future Directions for Technology in Education. SNDT Women's University. March 21, 2014.
- Academic excellence through quality technical education: Challenges and opportunities. Keynote speech at AICTE sponsored national seminar, Thakur College of Engineering and Technology, Mumbai. January 23, 2014.
- Interactive visualizations to develop scientific abilities. Invited seminar at Homi Bhabha Centre for Science Education, TIFR, Mumbai. November 22, 2012.
- Interactive visualizations to develop scientific abilities. Invited seminar at Freudenthal Institute of Science and Maths Education, Utrecht, Netherlands. June 28, 2012.
- Educational Technology: The Why, the What and some of the How. Invited talk at Symbiosis Internal Conference on Open and Distance Learning, Pune. February 23, 2011.

Consultancy

- Designing pedagogy for FOSS training modules. In-Open Technologies. 2009-10.
- Designing Modules for Computer Teacher Training. In-Open Technologies. 2010-11.

Sponsored Projects

- Project OSCAR, Open Source Courseware Animations Repository. (Co-PI). MHRD-NMEICT project. 2010-14.
- Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning. (PI). IITB Coordinator for MHRD-NMEICT project (anchored at IIT Kharagpur). 2010-13.
- OSCAR for physics higher education. (PI) Internally funded MHRD project. 2009-12.
- Learning-centered framework for evaluation of e-learning content. Seed Grant IRCC, IIT Bombay. 2009-14.

Professional Activities

- Executive Committee Member, Asia Pacific Society of Computers in Education 2014-17.
- Program co-chair, IEEE International Conference on Technology for Education (T4E2010, T4E2012, T4E 2014)
- Steering committee member, IEEE International Conference on Technology for Education, T4E series, flagship ET conference in India.
- National Mission on Education through ICT projects: "Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning." (PI), "Project OSCAR - Open Source Courseware Animation Repository" (co-PI).
- Reviewer for journals: ETR&D, ET&S, IEEE ToE, RPTEL.
- Program committee member for international conferences: ICALT, ICCE, CELDA, T4E, ICSLE.