New York, June 10, 2008 -- ACM (the Association for Computing Machinery) will present the 2007 Eugene Lawler Award to Randy Wang and the Digital Study Hall (DSH) team for innovative use of cost-effective digital technology that helps improve the education of underserved children in South Asia.

Wang's vision, developed while he was an assistant professor of computer science at Princeton University, was for a system that harvested community-generated videos of the best grassroots teachers to help schools in urban slums and rural areas in India. In 2005, Wang and Dr. Urvashi Sahni of the Study Hall Foundation founded DSH. Wang, currently with Microsoft Research India, described DSH as "a bit like YouTube meets Netflix in a rural schoolhouse with a dirt floor." The Eugene L. Lawler Award for Humanitarian Contributions within Computer Science and Informatics carries a $5,000 prize.

The DSH project, a collaboration between computer scientists and education experts, is a user-generated video sharing system intended to overcome the shortage of qualified teachers in poor schools. DSH provides tools to help local schools and non-governmental organizations (NGOs) make videos of the best teachers in actual classroom sessions teaching standard textbook materials. These videos are stored and shared in a network of "hub databases," and then distributed to underserved local "spoke schools" via digital video disks (DVDs) using the postal system and other couriers. Local teachers use these videos live in their classrooms as they interact with their students.

A dedicated team of volunteers and staff in India, Bangladesh, and the U.S. collaborate on content production, distribution, teacher training, evaluation, technology development, pedagogical research, and other educational activities. This process delivers quality instruction that these poor students could not access otherwise, and helps train local teachers as they imitate and learn from experts featured in the videos. When sufficiently advanced, these teachers may be featured in new videos that are shared with other schools, thus improving the system as it is being used.

In a recently published preliminary evaluation study, children in several DSH "spoke schools" achieved a dramatic rise in test scores, and their local teachers demonstrated significant improvement in their grasp of subject matter as well as pedagogical skills. In addition, the classrooms showed significantly increased student participation.

Currently, DSH works with several thousand children in some 30 pilot schools in five cities in India and Bangladesh. The DSH database contains more than 1,000 lessons in five major local languages and 500 other educational videos. The DSH approach has recently been adopted in spin-off projects for agricultural extension and rural healthcare education.

As the project evolves, the DSH team envisions working towards a freely accessible video database that
covers every subject for every grade level and language, and for every state and national syllabus. The result would be a "people’s database of everything," which they believe may one day have profound implications for democratizing knowledge and education in these countries of great need and promise.

DSH is partially supported by the Study Hall Foundation, Microsoft Corporation, the University of Washington, the National Science Foundation, the Mona Foundation, and individual donors. More information on DSH is available at http://dsh.cs.washington.edu.

Wang was awarded a B.S. degree in computer science from the University of Texas at Austin, and a Ph.D. degree in computer science from the University of California, Berkeley.

ACM will present the Eugene Lawler Award at its annual ACM Awards Banquet June 21, in San Francisco. The award, initiated in 2000, is given once every two years. Financial support for the award is provided by individual contributions.

About ACM

ACM, the Association for Computing Machinery www.acm.org, is the world’s largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field’s challenges. ACM strengthens the computing profession’s collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

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