Volunteer Sarbari Gupta

"These are good fields for women and those from disadvantaged families. Helping them onto a STEM Pathway makes sense."

As she prepared to lead a computer science lesson, RESET Volunteer Sarbari Gupta explained that this session would differ from her previous visits because it would not involve the use of computers. The topic for that day was algorithms. The children were to develop a step-by-step set of directions – a non-digital exercise in logic preparatory to coding a computer program. In this case, the sequence of steps the children were to identify would be like those used to program a robot. Before the students arrived, Sarbari had marked a pathway on the floor with masking

tape. When the lesson began, the children were broken into teams; one child on each team was blindfolded and led to the starting point of the course laid out on the floor. The other teammates then directed the unseeing student along the pathway using only spoken instructions: turn left, turn right or go forward. Students each had a turn being blindfolded and following the guidance from their teammates. Sarbari had wanted the children to be active and have fun as they learned about algorithms. That was certainly the case as the team members jumped up and down in excitement while shouting out their instructions.

This "unplugged" lesson was one in a series included in Sarbari's program at INMED's Partnerships for Children in Loudoun County, Virginia. INMED has been a RESET partner for two years, hosting computer science volunteers in its after-school program for children. Their mission is to build pathways that enable vulnerable children, families and communities to achieve well-being and self-reliance. At the Family & Youth Opportunity Center, the after-school program site, INMED's goal is to help at-risk children get a healthy start in life and provide them opportunities to achieve academically and socially. RESET volunteers help with this goal by providing hands-on computer science programs and connecting the children to professionals who have chosen career pathways in related fields. INMED's Youth Education Services/Volunteer Coordinator Yahaira Hanon values Sarbari's contribution: "We really appreciate Dr. Sarbari's volunteer work; the kids love and enjoy her class."

Sarbari is Chief Executive Officer of Electrosoft Services, a Reston, Virginia company

that focuses on cybersecurity, software and information technology, with clients that include the U.S. Army and Navy. Her educational background includes a degree in Electronic and Electrical Communication Engineering from the Indian Institute of Technology in Kharagpur, and masters and doctoral degrees in Electrical Engineering from the University of Maryland. Sarbari met RESET's Shaheen Khurana through code.org, a nonprofit dedicated to expanding access to computer science in schools and increasing participation by women and underrepresented minorities. While raising her two daughters Sarbari ensured they were aware of options in STEM fields. With her children now grown, Sarbari volunteers for RESET because she wants to inspire other children, especially girls and those from disadvantaged backgrounds, to explore information technology. She also volunteers as a mentor for Women in Technology and an instructor for code.org.

When asked how she finds the time for volunteering while serving as the CEO of Electrosoft, Sarbari says that she makes it work because giving back to the community is a priority for her. She explains that Shaheen Khurana helps by providing the content for her computer science program, which would otherwise be a time-intensive endeavor. Sarbari thinks RESET can attract more volunteers with demanding jobs by providing content in other STEM fields as well.