

"It was wonderful to engage with so many Girl Scouts, parents, leaders and IISE volunteers at the Atlanta Annual Conference workshop. We were fortunate to have outstanding participation from all levels of IISE membership and career diversity. I was especially happy to see so many of my former students enthusiastically serving IISE. Thank you to Diana Berry for her continued leadership in organizing this successful event to introduce fun and exciting opportunities of an ISE professional career. Young folks will be critical to solving the complex and critical problems of the future!"

Volunteer mentor Jamie Rogers, IISE Fellow and faculty member,
University of Texas at Arlington



Photos by Keith Albertson and Kelli Huffman, IISE

Lighting a STEM fuse for future engineers

Annual gathering matches Girl Scouts with mentors for fun learning event

By Keith Albertson

While the current state of industrial and systems engineering was being discussed on a Sunday afternoon throughout the 2025 ISE Annual Conference & Expo in Atlanta, a group of 20 professional and student ISEs were helping to lay the groundwork for its future.

On June 1 at the "Introduce a Girl to Industrial and Systems Engineering" event, 43 middle school and high school members of the Girl Scouts of Greater Atlanta gathered at the Renaissance Atlanta Waverly Hotel. The girls took part in a fun hands-on activity and received career advice from professional engineers and ISE students discussing their backgrounds and profession.

Afterward, each Scout received a STEM Career Exploration Badge for their efforts, all aimed at sparking their interest in science and engineering careers.

"Our Girl Scouts are always thinking about their own futures and what they want to be when they grow up," said Ruth Lonvick, senior director of STEM Community Programs with the Girl Scouts of Greater Atlanta. "And we really want our Girl Scouts to understand the different careers that are available to them, especially in the STEM world. Girls on average, statistically, don't feel as able to move into different STEM fields. And by giving them experiences like this, they really see that this is a place where they belong and where they can be really successful in the future."

"This activity was so amazing. I had fun."

Girl Scout Laneisha

"The activity was amazing. I learned a lot because I'm not good at putting things together, so it was a lesson learned on how mechanical engineering and industrial engineering really works."

Jabrie, Laneisha's mother

To hone their problem-solving skills, the Scouts were grouped into teams at a table with their mentors and assigned to create a pen factory, complete with a chosen name. The girls took apart ball-point pens, then reassembled them and measured the time it took to complete the task. Then they discussed how to improve their processes and performed the procedure again to compare their assembly times. Afterward, a representative from each group explained to the entire gathering how they practiced process improvement.

This year's event included an extra wrinkle: Several of the parents who attended were grouped at their own



The Girl Scouts showed their STEM Career Exploration Badge certificates in a group photo after the event.



Volunteer mentors from the professional and academic fields helped with the Girl Scouts' activities while providing career perspectives.



table and tasked with completing the same activity as the Scouts.

After the pen factory exercise, the volunteer mentors shared their career stories, offered advice and answered questions, including one from a Scout who asked: "Is a plumber an engineer?"

"It was pretty fun. I enjoyed the assembly and meeting all these cool people. I want to work with electricity so it's sort of in the same vein."

Girl Scout Erin

IISE Fellow Diana Berry, who organized the event, noted that the Scouts were well organized, with girls at the tables grouped by age with two mentors per table. Two other volunteers roamed from group to group acting as quality inspectors.

"I truly enjoyed working with Ruth Lonvick and the Girl



Before beginning the session, attendees recited the Girl Scout Pledge.



After completing the pen project, a representative from each team explained their process and how they improved their times.

Scouts of Atlanta. This chapter was very organized and proactive in everything; it was a joy to work with," Berry said. "The girls were smart, fun and easy to work with and they enjoyed the snacks we brought for them this year. The part I always enjoy the most on this event is how creative the girls are with their company names and their executive summary reports at the end of the activity. I

"There was so much shared excitement during the pen factory activity. Allowing the girls to name their factory invited a sense of ownership and control. ... They may not know it yet, but they were being introduced to skills they will use in their careers."

Volunteer mentor Rosie Kallie, faculty member,
University of Texas at Arlington

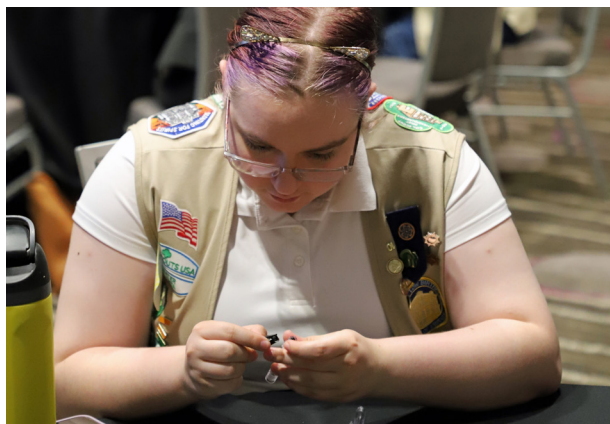
"I always love introducing girls to engineering, especially industrial engineering. It was especially impactful that some of the girls in my group did not know a woman engineer before the event."

Volunteer mentor Maddie Mathews,
Oregon State student

also had fun listening to their clever questions. This year we had plenty of volunteers to answer all their questions and I was surprised about the quality of those."

To build on the popularity of this year's event, Berry hopes to repeat it at the 2026 Annual Conference May 16-19 in Arlington, Texas.

"This event is growing in size every year and I hope we



"It was a lot of fun. I really enjoyed coming up with the company name. It was also really interesting to learn about people's jobs. This definitely made me consider becoming an industrial engineer because I've always wanted to become an engineer, and now I'm considering industrial engineering."

Girl Scout Carrie



"It was amazing. It was just a lot of fun to see all the girls coming up with ideas and at the parents' table. We were trying hard to keep up with them."

Jennifer, Carrie's mother



Scouts at each table selected a team name and learned how to disassemble and reassemble a ball-point pen while improving their process each time.

Volunteer mentors shared their time, expertise

The volunteer mentors who took part in the Girl Scouts event included: Maise Alawwad, Natalia Alza, Kara Annis, Jessica Aujla, Diana Berry, Macy Comm, Kathryn Eckhardt, Amanda Mewborn, Saurabh Parakh, Cilla Pemberton, Maddie Mathews, Jamie Rogers, Rosie Kallie, Ni Owens, Tiffany Hudgins, Nicola Chrzanowski, Isabel Vega, Sara Vick, Aman Sapra and Nicole Redder.

"What a joy it was to give back and inspire the next generation of future engineers by sharing what industrial engineers do. My favorite part of this session was getting to know the Girl Scouts at my table, answering questions about what IEs do and helping them think and talk through their process and how to improve it."

Volunteer mentor Kara Annis, process improvement specialist, Cook Children's Health Care System



Parents of the Scouts sat at a separate table performing the same activities as the girls.

can have a great turnout again next year in Arlington," she said.

And someday, such an event may inspire some of the Scouts to attend an IISE conference again as a student or professional.

"I think we had heard a few say that they wanted to be roller coaster engineers or they wanted to look into different types of engineering," Lonvick said. "Some of these Girl Scouts are in middle and high school and they're looking toward their immediate future."

Editor's note: At the request of the Girl Scouts, last names of the girls and their mothers have been omitted throughout. ❖

"It was awesome, I had a lot of fun. I love the ability to help people and see things that you wouldn't normally be able to see."

Girl Scout Sydney

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