

swe **NEXT**



What is Software Engineering?

As more and more of our world becomes virtualized and digitized, Software Engineering has become a very popular field. People are spending more time than ever on computers, smart phones and tablets for entertainment as well as business. You can now do all your banking online while streaming your favorite show on Netflix and messaging your friends. Without the help of Software Engineers none of this would be possible.

Software Engineers are responsible for developing – you guessed it – software! Any program that runs on a computer or device that allows us to be productive, place orders or communicate with friends is software developed by an engineer. Without software, our computers would just be pieces of equipment incapable of accomplishing anything. [Click here to learn more about being a Software Engineer.](#)

Day in the life of a Software Engineer

Meet Emily Redmond, a Software Engineer with Vanguard. Find out how she got there, the types of projects she's working on, and how you can #BeThatEngineer on SWE's [All Together](#) Blog.

SWENext Awards Season Has Begun!

The Society of Women Engineers strives to advance and honor the contributions of girls and women at all stages of their engineering journey. SWE wants to recognize the successes of members who enhance the engineering profession through contributions to the community, education and industry.

We also like celebrating awesome SWENexters because it inspires us!

The following awards will be given out at SWE's annual conference, WE19, in Anaheim, California, on November 8 and 9, 2019. Check them all out to see which awards you can apply for!

SWENext Northrop Grumman Community Award

Eligible: Grades 9, 10, and 11 (in Fall 2019)

What you have to do: Create a poster that answers the questions: How do we get more female middle school and high school students involved with STEM? How do we encourage these students to stick with STEM as they plan for college?

What you can win: Participation in the Community Award poster presentation where the winners will present their posters to middle school girls, parents, educators and professional engineers; participation in the SWENext High School Leadership Academy, Invent it. Build it., and an exclusive behind the scenes tour of Disneyland.

Deadline: September 23rd (This has a rolling acceptance for up to 25 students starting as early as late May, so apply early!) Also, one SWENext will be announced as a "SWENext Influencer" in mid to late October.

Questions? Contact Sabrena.lopez@swe.org.

[Click here for benefits and an application >>](#)

SWENext Global Innovator Award

Eligible: Grade 12 (in Fall 2019)

What you have to do: Answer four short essay questions and create a video that is less than three minutes long.

What you can win: All expense paid trip to Anaheim, CA, for you and a chaperone; recognition at the SWE Awards Banquet; participation in the SWENext High School Leadership Academy, Invent it. Build it., and an exclusive behind the scenes tour of Disneyland.

Deadline: September 1st (Up to six winners will be announced by September 13th)

Questions? Contact Sabrena.lopez@swe.org.

[Click here for benefits and an application >>](#)

SWENext Clubs Challenge

Eligible: Registered SWENext Clubs for High School students

What you have to do: Create a five to seven minutes video that addresses the 'WE Live, WE Learn, WE Lead' theme of WE19. The "WE Learn" portion should include a demonstration of an engineering activity that your club has completed and will demonstrate live at WE19.

What you can win: An all-expense paid trip to Anaheim, CA, for four club members and a chaperone where you will perform your demonstration live. You will also participate in the SWENext High School Leadership Academy, Invent it. Build it., and an exclusive behind the scenes tour of Disneyland.

Deadline: September 1st (One club will be announced as the winner by September 13th)

Questions? Contact Sabrena.lopez@swe.org.

[Click here for benefits and an application >>](#)

Learn How to Be A Leader at the SWENext High School Leadership Academy!

Take the next step into leadership with SWE!

The SWENext High School Leadership Academy (SHLA) is a two-day program taking place at the **Annual SWE Conference in Anaheim, California, on November 8 and 9, 2019**. The program provides high school students with leadership training, college advice, and the opportunity to experience the SWE community first-hand.

**Note: Awards/Club Challenge applicants do not need to apply to SHLA through this application. This application is for those interested in attending the Leadership Academy but not interested in applying for the awards. Students will receive SHLA registration information after submitting any award application.*

Eligible: High school students who identify as female

What you have to do: Tell us about your STEM activities and leadership roles

What you can win: Participation in the SWENext High School Leadership Academy and Invent it. Build it.

Application Deadline: October 14th (This has a rolling acceptance for up to 60 students starting as early as late May, so apply early!)

[Click here for benefits and an application.](#)

Questions? Contact sabrena.lopez@swe.org.

Happy Asian Pacific American Heritage Month!

In May, we celebrate Asian Pacific American Heritage Month. In honor of this celebration, read on to learn about some Asian-American female engineers, past and present. [Click here to learn more about Asian Pacific American Heritage Month.](#)

Chien-Shiung Wu is also known by many as “the Chinese Madame Curie.” After beginning her studies and career in China, Chien-Shiung Wu moved to the United States where she attended graduate school at Berkeley. Her studies and then post-school research revolved around radiation. After teaching for a short time, she joined the Manhattan Project and worked in their materials lab. [Click here to learn more about Chien-Shiung Wu.](#)



Sunita Williams is an Indian American astronaut who has made multiple trips to the International Space Station. Before becoming an astronaut, Sunita studied physical science at the US Naval Academy and Engineering Management at Florida Institute of Technology. Sunita has held and still holds a variety of records from her time on the International Space Station. When she completed her 7th spacewalk, that was the new record for women astronauts. Sunita is also the first person to ever run a marathon in space. [Click here to learn more about Sunita.](#)



Kaanchana Allanki is a Software Development Engineer for Amazon Web Services in Seattle. She has a B.S. in Computer Engineering from San José State University. She joined the Society of Women Engineers (SWE) in her freshman year of college, stayed very involved all four years, and became President of the San Jose SWE section during her senior year.



Kaanchana has advice to share that has helped her to grow:

1. Ask questions. Asking questions does not mean you're not confident. In fact, it means the opposite!
2. Never be afraid of questioning things even if you're the least experienced person in the room because if no one questioned already existing systems, technology would have never advanced.
3. As long as you are confident in yourself, you will shine. People in the workplace love it when someone's confident and that will definitely take you a long way.
4. Find a mentor. Find someone who inspires you, even if it's a woman who spoke at a keynote in a conference and you think you'd have no chance of interacting with.

Connect with them on LinkedIn or talk to them after the event. Ask them if they would be willing to answer questions you may have about school and career. Having a mentor you can trust and learn a lot from will always go a long way.

SWENext Clubs Corner



In Clubs Corner, we feature a SWENext Club every month. This month we are featuring the **Lehigh Valley Academics SWENext Club**.

Hailing from Bethlehem, Pennsylvania, the [Lehigh Valley Academic](#) SWENext Club was founded in 2016 and hosts 9th through 12th grade students twice a month for meetings. Some of the activities they have done in their meetings include a helping hand design challenge activity, building catapults, making slime, playing engineering principles Jeopardy, planning their outreach activities and more! They also are connecting their students with local STEM professionals to give them role models and discuss the wide array of career possibilities in their fields!

During Engineering Week, they do STEM activities with local elementary school students each year! One activity they did with these students was teach them how to make cars with household items. After they built them, they had a race down a hill structure that they built!

Meet a SWENext Club Officer

Meet Maya R., a SWENext [Global Innovator Award Recipient](#) from San Diego! She comes to us from the Patrick Henry High School SWENext Club. She is also the founder and president of her Club!

Maya wanted to increase female participation in



Maya is in the middle.

STEM and knew the value of SWE conferences and the SWENext Club Challenges. Her school won the **SWENext Club Challenge** last year and attended WE18 in Minneapolis, MN! She and her team made a video demonstrating how **Stephanie Kwolek** broke boundaries in Chemical Engineering! The most valuable thing she learned from attending WE18 was networking and self-advocacy. She is thrilled to pursue Computer Science in college and wants to get involved in entrepreneurship!

Interested in having your SWENext Club or Club Officer highlighted in the monthly SWENext Newsletter? Email Haley, the SWENext Clubs Reporter, at hla37@cornell.edu!

SWENext Social Media Challenge with a Chance to Win a \$25 Amazon Gift Card!

May 7th was National Teacher Day! Here at SWE we want to know which teachers or role models of yours have inspired you in science, math or engineering related fields. Tell us about them, or if you can, take a picture with them and share it with us!



Follow **@SWENext** on Instagram and send us a direct message with your picture and a blurb about why they inspire you by June 4th to be featured on the SWENext Instagram Account!

One submission will be selected to win a \$25 Amazon gift card!

Did you know? SWENext is on Instagram! **Follow us at SWENext Instagram.**



And SWENext is on YouTube! Subscribe at **SWENext YouTube Channel** to make sure you don't miss any new videos.

Featured SWE member engineers this month on the SWENext YouTube Channel are **Sunita Lavin, Computer & Electrical Engineer** and **Birce Onal, Biomedical Engineer.**



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