

What's next



Life at Nuance

Spotlighting Innovation for International Women's Day

Our researchers think big. They're builders, problem-solvers, and love a good challenge. In honor of International Women's Day, get to know Sharmi and hear how she uses her creativity and passion to build cutting-edge technology that changes the way we work.

Meredith Mascolo

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March 8 is **International Women's Day**, and this month, we're spotlighting some of the incredible women at our company. To kick it off, meet Sharmi – she's passionate, intelligent, and curious – important qualities for a researcher to possess. Hear about the innovative projects she is working on to improve the lives of others every day, and what she is doing to ensure a more gender-diverse workforce.

What you do at Nuance?

I am a Research Technical Manager focused on Machine Learning (ML) for Automatic Speech Recognition (ASR) and Natural Language Understanding (NLU). I oversee end-to-end research projects from research to engineering and manage teams of technical research scientists, engineers, and data scientists. We build state-of-the-art ASR, NLU, and dialogue solutions so doctors and clinicians can use our [Nuance Medical Virtual Assistant](#) while they walk around the exam room without restricting themselves to headsets or needing to be in proximity to a microphone. They can also review patients' medical records, schedule appointments, and order lab work using their voice. I also work on cool projects like the [Nuance Dragon voice-based dictation system solution](#) for students and professionals. This solution makes note-taking and formatting easier by allowing people to use their voice to get work done. I really enjoy building these technologies!

What's your background?

I grew up in Kolkata, India, and came to the U.S. for college. As a woman, I had to overcome impeding social expectations and challenges and make mindful decisions to take this first step toward higher education in a foreign country. I earned a PhD. in Accent Classification and Automatic Speech Recognition from the University of Colorado Boulder and an MS degree in Electrical Engineering and Digital Signal Processing from the University of Texas at Dallas. In my research, I studied Indian and Chinese accents in U.S. English, with my own accent as the inspiration for my thesis. I've always been fascinated by the diverse intricacies of speaking styles people have along with the variation of their ethnic backgrounds and geographical locations. I have been working in Core Research at Nuance for (almost) nine years.

What inspires you to build/research?

Speech research is so inspiring to me – the presence of accents, noisy-environments, multiple languages spoken at the same time, background speech (like a running TV in the background or cocktail party noise) – these factors make automatic speech recognition and understanding very challenging. I want to solve them! Nuance makes ASR and NLU systems in multiple languages for many professionals, for example, doctors, lawyers, police officers, and social workers. Helping these professionals amplify human-to-human connections instead of typing laborious documentation and creating documentation without the touch of a button has a huge impact on their daily work. I constantly put myself in their shoes and think from their perspective, asking how our team can innovate to help them perform at their fullest potential. At Nuance, there is a saying that “we don't hope for success, we make our own.” My team and I live by that mantra and it's our driving force to innovate more and to be more.

What is your most memorable moment at Nuance so far?



I have had so many rewarding moments at Nuance! One of my favorites was speaking at our company-sponsored “Bring Your Child to Work Day.” Over my career, I have given numerous technical presentations to highly skilled researchers and dedicated sales employees. However, the most satisfying presentation of my life was running a cool class on ASR for 5- to 15-year-old children! I presented and hosted an interactive demo to 50 super attentive and smiling kids, and they loved it!

What has been one of the biggest tech challenges you’ve faced?

At Nuance, we always have new challenges to conquer but they motivate me to innovate more. Our most recent research work of “law-enforcement-interview” was daunting at first, but we are putting our creative minds together to find a solution. The “[law-enforcement-interview](#)” is an organized conversation in an interview room with cameras and microphones placed on the ceiling and walls of the room. This technology can also be applied to impromptu interviews at-the-scene and our AI system is designed to capture and analyze relevant speech through police officers’ body cameras. In either situation, conversations are very complex and mixed with many levels of emotions and adverse situations. We partnered with U.S. police departments to analyze speech and automatically transcribe, summarize, and catalog this conversational speech for easy searching and referencing.

It’s International Women’s Day this month and Nuance is celebrating it in the month of March. What does it mean to you?

I am passionate about paving a path for future boys and girls to recognize the need for gender diversity in STEM, and I’m dedicated to doing what I can to support it. I am a member of the Nuance Network “WIN,” or Women in Nuance, (one of our Employee Resource Groups). I also organize international panels and collaborative forums outside Nuance dedicated to reducing the gender gap in STEM, identifying key global priorities for achieving [gender equality, and empowering women](#). I mentor young female students in graduate and undergraduate programs to help them realize their full potential and improve their leadership skills. I pioneered the

Women in Science (WIS) Panel at the International Conference of Automatic Speech Processing: Interspeech 2018 in Hyderabad, India, and served in the panel, where men and women discussed the imminent issues of the gender gap. A more gender-diverse workforce is better for business and growth of research, and many girls and women are flourishing in STEM despite the odds stacked against them. I feel empowered to push this cause forward.

What's your advice for your 20-year-old self?

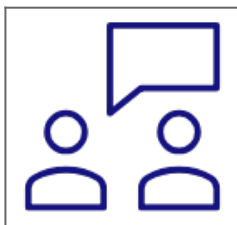
My 20-year-old self (if I remember her!), was a fierce girl just realizing her potential. She chose her own path and defined herself. She liberated herself from social bindings and chose education. If I could go back in time, I would say "Thank you, for believing in yourself and starting to dream big! You made it easy for me to follow. You didn't escape reality, you embraced reality and found ways to amplify your voice in it. You gave me the strength to speak up. You made me who I am today."

What are you currently watching?

[Amanda Gorman](#) – and the more I hear her speak, the more I believe that the hill we climb every day is not that daunting. We can do it! My job right now is to co-create a world for my daughter and son, and all other children, so they are empowered to be brave enough to be the light, "For there is always light!"

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More Information



Hear more from a panel of innovative and creative women technologists from Nuance!

Join this MassTLC event on March 31: Sharing Perspectives: Women Change Agents in Tech

[Register now](#)



About Meredith Mascolo

Meredith joined Nuance in 2013 and is the Senior Manager, Communications. A perfect job for her, as she loves words, puns and idioms. She's also the community manager for our company intranet. Meredith earned a B.M. in music education from Oberlin Conservatory and a M.S. in Administrative Studies, Innovation and Technology from Boston University. She is a classically trained violinist who enjoys playing her 5-string electric at yoga classes and other musical projects. She loves reading, cooking and yoga.

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