

REALITY LABS

Doin' it for themselves: Meet the women helping to build the future of AR/VR

MARCH 13, 2019



As the augmented and virtual reality landscape continues to evolve, these emerging technologies open up new ways for people to connect with each other — today and tomorrow. Women are at the forefront of the industry, from [creative directors](#) working on [state-of-the-art AR effects](#) and [storytellers merging immersive theater with VR](#) to the [research scientists](#) and [game designers](#) pushing the boundaries of what's possible. In honor of [Women's History Month](#) and [International Women's Day](#), we're highlighting some of the women at Facebook and across our industry who are blazing trails to help build the future of AR and VR — and the ways in which this community comes together to inspire and lift up other women.

RECOMMENDED READING

Simulating dynamic soundscapes at Facebook Reality Labs

Igniting VR education

Oculus Research Q&A: Marina Zannoli

Claudia Backus: Saying “yes” to the unknown

From sales and marketing to product management, Claudia Backus has traveled an interesting path since being recruited out of college by [Oracle](#) 25 years ago. “I was living on the East Coast and looking to build a career in finance,” she recalls. “I didn’t think I wanted to work in tech, but they were very insistent and I found the idea of working on the West Coast attractive, so I relented and became one of their first 50 employees. After that, there was no going back for me because I really enjoyed working with technology products and being part of an industry that’s constantly transforming itself.”



Over the past 15 years, Backus has focused on building developer programs and

where it could sell and distribute content on e-readers and tablets.

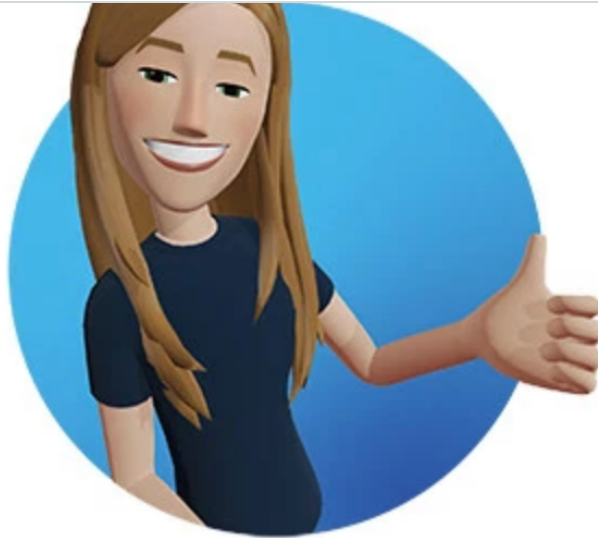
“I didn’t know anything about the traditional world of retail, so I had to learn the company’s business while at the same time building a team to evolve it,” Backus says. “This experience taught me to be a very good listener, ask lots of questions, and be open to taking risks and experimenting.”

It’s little wonder, then, that she found herself working in AR/VR where the physical and virtual worlds overlap.

“I’m inspired by my 14-year-old daughter, Sofia,” notes Backus. “It’s very fulfilling for me to know that the work that I do is making an impact in her life and her education. I love watching how technology is changing the lives of our future generations. AR/VR is one of the most interesting areas in tech, so I encourage other young women to not be afraid by the challenge, bring their ideas, and join us in creating the future.”

Marlina Fletcher: Paying it forward

“It all started with an internship promoting [Adult Swim](#) as a college rep. I developed a relationship with Greg Heanue, who oversaw the program at the time. About a year or so after graduating from [Arizona State](#), Greg offered me a position at [BBC America](#), where he was working as the VP of Marketing. I packed my bags, moved to New York, and started my career!”



Some 14 years later, [Stink Studios](#) Managing Director Marlina Fletcher has come across more than a few roadblocks on her path to success. “At many (if not all) of my previous employers, I’ve discovered that doors seem to open much more easily for certain groups than others,” she explains. “This is still an obstacle I and many others are working to overcome in varying degrees. To stay positive, I rely on my work ethic and perseverance when challenges arise and always take pride in my work. Eventually, people are forced to take notice, and if they don’t, there’s always another way to knock on that door — or break it down.”

Because AR/VR is such a diverse field, there are a number of unique careers available within it that leverage different tech, creative, production, and management skills. “Think big, adapt, and never limit yourself,” Fletcher recommends. “The industry is constantly shifting, and with a nimble and open mind, you may be building the future. That’s half the fun.”

Fletcher also encourages women to reach out, connect with others, and find ways to give back. “Build your network,” she says. “And as you move forward, help those who are rising up behind you.”

Saara Khan: From anime fan to AR architect

Most of us would be hard-pressed to link our career path to a single childhood

Tech at Meta

music, and what looked like an all-female cast of superheroes,” she says.

“Nowadays, I hope young girls can take such content more for granted, but at the time, I knew I’d found something special. That TV show was [Sailor Moon](#), and I’m forever grateful for the way it embedded in me an unshakeable belief that strong women can come together to use intelligence, love, and friendship to overcome any challenge and make the world a better place.”



Khan’s favorite character was Sailor Mercury, a technology-empowered teenager who used augmented reality and a powerful supercomputer to analyze challenges and carefully calculate her next move. “I wanted to be her,” Khan says. “I wanted to have her AR glasses and use technology along with love and friendship to also solve the world’s problems.”

At 17, Khan was developing semiconductor electronics at the [U.S. Naval Research Laboratory](#). Following a bachelor’s of science in electrical engineering at [University of Maryland](#), she completed a PhD at [Stanford University](#), with an emphasis in Optics and Photonics. “In addition to theoretical contributions to the field, I used these technologies to develop better ways of glucose testing, provide low-cost urine analysis, and, in my main project, detect malaria cells in blood resulting in new funding to Stanford from the [Bill & Melinda Gates Foundation](#),” she notes.

After serving as co-founder and CTO of a solid-state lidar start-up, Khan joined

Tech at Meta

existing Oculus products and now works to develop the system architecture for future AR/VR headsets.

“AR/VR is so much more than a wave of technology — it’s a canvas upon which we get to paint our hopes and dreams for the world,” Khan says. “The field is at one of the most unique and interesting places in its history. We’re literally creating the future together.”

Jasmine Lawrence: Gaming the system

“One of my biggest inspirations is how we can use technology to solve some of the world’s hardest people-centered problems,” explains Facebook’s Software Technical Program Manager for [Portal](#) Jasmine Lawrence. It’s been six years since she got her start in tech, interning on [Microsoft](#)’s [Xbox](#) console team while majoring in computer science at [Georgia Institute of Technology](#). She successfully transitioned from the gaming space to AR/VR in late 2016, creating new enterprise AR experiences with the [Microsoft HoloLens](#) — though the two fields really aren’t that far apart.



Lawrence keeps the importance of storytelling and world-building from her

The road to success hasn't always been an easy one. "My biggest professional challenge has been managing my own growth and professional development, especially in situations where my manager wasn't equally invested," Lawrence says. "I overcame that challenge by taking complete ownership and creating my own network, path, and plans to progress in my career. That meant finding mentors and role models who were open about their own journeys and obstacles; leveraging internal and external online education platforms to gain new skills, sharpen my strengths, and understand growth opportunities; and finally attending networking events to get a better picture of how other people tackle similar challenges."

Her advice to other women and girls considering a career in AR/VR? "Find a problem in AR/VR that aligns with your personal values and skills. Instead of following the trends of what you may have seen to be successful, chart your own course and pursue work in areas that are personally relevant to you and align with your strengths."

For Lawrence, that means using real-world data to understand systemic problems — and then connecting and informing people to solve them. "When we bring the right people together, they can build the right relationships and achieve more," she says. "When we accurately and simply inform people, we give them the information they need to make the best choices for their lives and the people who depend on them."

Jade Mathieson: Combating inequality through inspiration

When [Sea Monster](#) Creative Director + Game Designer Jade Mathieson joined the South Africa-based start-up eight years ago, augmented reality wasn't necessarily a core part of the business model. "At first our focus on AR was a strategy to make us stand out in the local market among all the other aspiring game studios," she explains. "We made an AR app for our business cards that triggered an animated sea monster emerging from our logo. At the time, that was often the first experience people had ever had of AR, and it made our business cards (and our team, by extension) much more sought-after! Now, we get to work on big AR retail campaigns, VR training simulations, and games."

Tech at Meta

inequality — but also increasingly high levels of access to smartphones, she says.

“I’m inspired by how we can use this technology to provide access to educational experiences that can cut across language and cultural differences and ignite awareness and curiosity that leads people to study in fields that can make a difference in improving their lives.”



She recognizes that, for women and girls like herself who live in developing countries, it can be particularly challenging to make a living in an emerging field like AR/VR — but by cultivating an interest in various parts of the industry (art, storytelling, science, mathematics, business), they can get a step closer to success and perhaps bring the technology home for the people who need it most.

“It can be difficult working for a start-up when everyone who’s following a more mainstream career path seems to be making progress and you’re stuck trying to find a way to convince people to fund projects using technology that most people don’t understand or even see the potential of — especially when what you do seems ‘nice to have’ but not really useful in the way that a doctor or engineer is useful,” Mathieson notes. “I overcame that by thinking of what made a big impact in my life — the books I read and the games I played that inspired me. If I can spread more inspiration and curiosity, then that’s something worth working for.”

Gizem Rufo: Asked and answered

Tech at Meta

be an expert in everything, but if you stay curious, you'll naturally learn and open yourself up to new ideas and viewpoints."



That's exactly how Rufo ended up in the field, following the better part of a decade spent doing academic research. "I knew that I wanted to apply my research skills to new technologies, but I really didn't have a very specific job in mind," she says. "I talked to many people (like over 50 informational interviews) in various areas of the tech industry to learn from their experiences and figure out where I wanted to take my career. The biggest takeaway from it was that talking to people gives you better information than job ads."

Following a stint at [Magic Leap](#) as a vision scientist on a systems engineering team, Rufo moved to FRL to work at the intersection of science and product development. "I love my job here at FRL, and to give back to everyone who talked to me when I was trying to figure it out, I try to talk to people (especially PhD students) who reach out to me directly if they're interested in learning about AR/VR."

Angela Song: Stand up and speak out

Tech at Meta

AR/VR team,” she says. “We’re trying to do something that no one has done before, so we’ve assembled a team from various industries to find novel solutions to tough problems. I bring my analytics and growth experience to help accelerate our path to AR/VR.”



While the future looks bright, Song’s career hit a rough patch a few years ago — and it took a toll on her confidence. “The harder the situation got, the harder I worked to fight it, but it wasn’t the right effort,” she says. “I was strong enough to recognize that the situation was toxic for me, and I chose to quit and take some time off. I recharged and reconnected with my family by doing meditation, exercise, and a lot of mom duties. Along the way, I got lots of support from my family, friends, and other women leaders.”

Back in the saddle and stronger than ever, Song encourages other women and girls: “Trust your instincts and the value of your voice. Early VR adopters have skewed very male, but that is not the future of AR/VR. This technology will be an integral part of everyone’s lives, and it will take everyone’s voices and life experiences in order to build those products. It’s important that you have the confidence to speak up — even if you’re the minority voice in the room.”

Julia Sourikoff: Future present

Tech at Meta

traveled from New York to Montreal, along with pop-ups at festivals like [Sundance](#) and [SXSW](#), the start-up commonly known as FoST set out to curate and explore the myriad ways that artists and technologists were reinventing storytelling, communication, and self-expression through new vehicles for creativity. Julia Sourikoff was there from the beginning, and then a visit to Los Angeles changed everything.



“I came out for [Unite Los Angeles](#) and took a meeting with [Tool of North America](#) Managing Partner Dustin Callif,” Sourikoff remembers. “I actually had known Dustin for several years because Tool is a company I really admired in the immersion and innovation-led advertising space. A lot of their directors and creative technologists were doing really, really cool stuff with interactive storytelling at the time, so I would always contact him when I was in LA and say, ‘Hey, what are your artists working on these days? What should I know about? What should we be curating?’”

But this meeting was different. Tool, as it turned out, was looking for someone to establish and lead its new immersive division, and Sourikoff jumped at the opportunity. “I kind of learned it on the fly,” she jokes. “Although I didn’t have a ton of background in the digital production pipeline, I was really lucky to have a community of artists and producers around me from FoST that I could call up for help and advice.”

where I think a lot of people are still figuring it out and are excited to connect with other people who are passionate about it,” she says. She also recommends looking beyond the community for sources of inspiration, adding, “Interdisciplinary thought is key to pushing the boundaries of what’s possible.”

Navigating the network + next steps

It comes as little surprise that the importance of networking is a common thread among these seemingly disparate stories. After all, common wisdom holds that, often in life, it’s not what you know but rather who you know that counts — and more importantly for members of historically underrepresented groups, like women in tech, a strong network can mean the difference between a sense of isolation and the comfort of community.

Inside Facebook, the Women of AR/VR resource group hosts monthly lunches that encourage women within the AR/VR organization to network, socialize, and connect with each other outside of their daily routines. The steering committee also brings in a number of special guest speakers, including [Code to Inspire](#) Founder and CEO Fereshteh Forough, [Sundance Institute New Frontier Lab](#) Programs Director Kamal Sinclair, and [Project Include](#) CEO Ellen Pao.

“The mission and objective for Women of AR/VR is to Empower, Enrich, Enable,” says Content Project Manager Katherine Bachert, who also sits on the steering committee. “These goals have impacted me directly, and I see it reflected in my behavior every day. When I joined the committee over a year ago, I felt shy and invisible in meetings, overwhelmed by everything I had to learn and questioning if I really fit in at Facebook. With direct encouragement from Diversity & Inclusion Program Manager Ebony Peay Ramirez and other members of the committee, I went from introverted and hiding in the corner, to being seen, accepted, and excited to participate. Volunteering helped my life open up to valuable opportunities, and I have blossomed through the experience. Seeing fearless women who confidently speak their mind and take their seat at the table gave me the strength to step onto a new path and approach my work with renewed vigor.”



Beyond their own companies and personal networks, many come together digitally via the [Women in VR/AR Facebook Group](#), where women, members of other underrepresented groups, and allies share job openings, resources, speaking opportunities, upcoming events, and more.

Of course, it's not enough for women within the industry to support each other — outreach to the next generations of professionals is crucial. We work with the [BRAID initiative](#), [Girls Who Code](#), [Year Up](#), and more to help improve gender diversity in the tech sector, but there's much more work to be done.

We look forward to working with the best and the brightest minds in our industry to build a better future. [We hope you'll join us.](#)

Share:

