In this episode of ACM Bytecast, host Rashmi Mohan is joined by researcher and professor, Jennifer Widom. Jennifer is the Frederick Emmons Terman Dean of the Stanford School of Engineering and the Fletcher Jones Professor of Computer Science and professor in the Stanford Department of Electrical Engineering. She graduated with a degree in music and eventually, her Ph.D. in the computer sciences.

Jennifer explains that while her path to the computer sciences was a bit unconventional, her journey was beneficial to her current career. Her time in music helped her to overcome stage fright and public speaking anxieties as well as giving her empathy and insight into the human condition. She encourages students from a diverse set of backgrounds to consider computer sciences. Jennifer explains that grounding her research in solving real world problems is important to her, and applying data research to an area of interest can be a way for students to combine passions.

Jennifer was an early adopter of Massive Online Open Courses (MOOCs) in 2010. She created and allowed students to take her database course for free. The MOOCs were not for credit or paid for, and so the students who took the course were there because they wanted to be. Jennifer explains that she never intended to create more MOOCs, however her original one is still available on non-profit platforms. While originally, there was a fear MOOCs would upend higher education, they’ve instead become a classroom more for people in industry looking to sharpen and gain skills. Some folks have theorized higher education will be changed again because of the pandemic, Jennifer thinks a major shift is not in the cards for now either.

Jennifer went on sabbatical in 2016 and she used that time to travel and teach short courses across the world. She coined the term MOIC - Massive Open In-Person Course - for her work. During that year she went to approximately 16 developing countries and delivered a week of data sciences courses. Each summer since, she’s travelled to three countries to continue the MOICs. While she’s received support from the University, ACM, and other organizations, the funding and travel logistics make the MOICs difficult to launch on a large scale. But for Jennifer, it combines her love of travel and teaching. She’d always been an avid traveller, even taking a year off from work, and her kid’s schooling to travel as a family. She says every moment was worth it.

As the episode ends, Rashmi asks Jennifer what she’s looking forward to in the world of computer science. As the new dean of engineering, Jennifer says she’s been able to learn about many new fields and she’s excited to see how computing will change how research is done across these different fields of study.

Key Takeaways:
0:31 - Rashmi introduces today’s topic and guest, Jennifer.
0:58 - Jennifer shares how she came to engineering.
4:44 - Rashmi asks if it’s still possible for students to take unconventional paths to computer science.
7:22 - Jennifer explains how she’s chosen research projects.
10:12 - Rashmi asks Jennifer how she got involved with MOOCs.
18:08 - Will MOOCs change the face of education in a pandemic?
20:50 - Rashmi wonders why Jennifer spent her sabbatical teaching.
24:09 - Jennifer explains why the MOICs didn’t take off like the MOOCs.
26:57 - How do different places teach computer sciences?
29:59 - Jennifer discusses how her love for travel came to be.
33:52 - Jennifer shares what she’s excited about for the future of computer science.

Links:
Learn more about ACM: https://www.acm.org/about-acm/about-the-acm-organization
Learn more about Jennifer Widom
Follow ACM on Facebook, Twitter, Instagram, and LinkedIn

Tags: AI, computer science, travel, MOOC, MOIC, Massive Online Open Courses, research, travel, sabbatical, database, data science, engineering, computer programming, higher education