

Bio-sketch - Sufi Zafar

Sufi Zafar has been working as a Research Staff Member at IBM TJ Watson Research Center, Yorktown Heights, NY since 2001. She is a physicist with extensive cross-disciplinary research experience in miniaturized biosensing devices, modeling of proteins, charge transport and defect creation mechanisms in nanoscale CMOS devices and nanofabrication. Sufi initiated and leads a biosensing project with the goal of demonstrating electronic biosensing devices that would push the frontiers of knowledge with applications in healthcare and IoT (e.g., agriculture, environment). Sufi's research efforts have resulted in biosensor technology transfer for commercialization, 79 journal publications, 88 granted patents, invited talks (including keynote) and invitations to serve on technical committees. She has received several prestigious awards and honors, including IBM Research Division Award (2005), IBM Outstanding Technical Achievement Awards (2013, 2018), IBM Master Inventor Award (2017), IBM Outstanding Innovation Award (2021), Senior IEEE Member (2014), American Physical Society Distinguished Lectureship Award on Application of Physics (2021) and American Physical Society (APS) Fellow (2009). Lastly, Sufi has served on various diversity committees and extensively mentored women engineers, new hires, graduate and undergraduate students.