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is a Professor of Informatics in the School of Information and Computer Sciences at the University of California, Irvine. Her research focuses on software engineering for large-scale data and systems. Early in her career, she was a founding member of the team at Xerox PARC that developed Aspect-Oriented Programming. Along with her research program, she is also a prolific software developer. Her open source contributions include being one of the core developers of OpenSimulator, a virtual world server. She is also a founder and consultant of Encitra, a company specializing in online virtual reality for early-stage sustainable urban redevelopment projects. Her book “Exercises in Programming Style” has gained rave reviews, including being chosen as “Notable Book” by the ACM Best of Computing reviews. She has a PhD from Northeastern University, and MS and BS degrees from Instituto Superior Tecnico in Portugal. She is the recipient of several National Science Foundation grants, including a prestigious CAREER Award. She claims to be the only person in the world who is both an ACM Distinguished Scientist and Ohloh Kudos Rank 9.

Abstract: Since the early days of computers, programming has been at the center of computing applications. However, the relation between programming and computer science has not been an easy one. Often seen as second class to other more worthy intellectual endeavors such as algorithmic development, computational thinking, Mathematics, software architecture, product design and many others, programming has remained both an unavoidable activity in the computing world and one whose mastery (or lack thereof) can make or break projects. So what is programming? This talk covers programming under several perspectives -- Art, Science and Engineering - making the case for giving it its own special place in STEM, and the respect it deserves. I will bring in examples of my own work as well as of many others over the past 70 years.