## PAST FORWARD BY ALLISON MARSH



THE HIDDEN FIGURES OF COLOSSUS **During World War II**, 10 Colossus computers operated around the clock at Bletchley Park, in the high-stakes, highly secretive effort to break Nazi Germany's Lorenz ciphers. These room-size machines, filled with banks of vacuum tubes, switches, and whirring tape, were the first electrical digital computers, predating ENIAC by two years. After the war the Colossi were dismantled, and nearly all of the documentation was destroyed. (The photo shows a re-created machine dating from the 1990s.) The very existence of the project remained secret for decades, as did the identities of the 273 women who operated them on this English estate. "If anyone asked us what we did, we were to say that we...did secretarial work," one of the women, Eleanor Ireland, later wrote.

→ For more on the history of Colossus, see spectrum.ieee.org/pastforward-jan2020