Assistant professor Min Wu is among the world’s 100 top young innovators according to Massachusetts Institute of Technology’s Technology Review magazine, which named her to its “TR100” list this fall. The list names 100 individuals under age 35 whose innovative work has made a profound impact on the world.

The nominees were recognized for transforming biotechnology, medicine, computing and nanotechnology.

Wu is developing novel solutions to multimedia security and content protection problems such as fraud prevention of binary documents and forensic tracking of classified multimedia content. She is a signal processing expert on security in multimedia applications and on hiding information in digital images. Her research has applications from the Department of Defense to the Hollywood film industry.

Wu holds U.S. Patent No. 6,285,775 for technology that adds a digital signature to a black-and-white image by subtly altering individual pixels on the edges of letters and other symbols. If widely adopted, this technology could make it virtually impossible to forge or alter an electronic image or document. Wu also holds three other patents on digital watermarking and multimedia. In 2003 she co-authored Multimedia Data Hiding with Bede Liu of Princeton University. She won an NSF CAREER Award for “Signal Processing Approaches for Multimedia Security and Information Protection” in 2001.

Originally from Beijing, Wu received her Ph.D. in electrical engineering from Princeton in 2001. She joined Maryland in 2001 with a joint appointment in ECE and the Institute of Advanced Computer Studies. She is also affiliated with the Institute for Systems Research.

Technology Review began the TR100 list five years ago to recognize the world’s top innovators under age 35. Inclusion among the TR100 has become one of the most prestigious awards for young innovators around the world.