

EIP

Dr Marian Rogers Croak, Black History Month 2023

In this our fifth and final article for Black History Month 2023, we profile Dr Marian Rogers Croak.

Dr Marian Rogers Croak is one of a few contemporary black inventors whose work has been acknowledged in her lifetime, and she continues to innovate and lead to this day. Highlighting Marian, her past accomplishments and how she continues to contribute to the wider scientific community is our way of marking the end of Black History Month. Not only have black inventors made substantial contributions and improvements to our lives with their innovative work, but are working right now in labs, lecture halls, and at home to make the world a better place.

Marian was born in 1955, in New York City, USA, only one year after the US Supreme Court ruled that public schools be desegregated. Encouraged by her teachers and her father, who bought her a home chemistry set, she was fiercely motivated to pursue STEM (science, technology, engineering, and mathematics) related studies and to reduce the barrier of entry to affordable communication. She graduated from Princeton in 1977 and the University of Southern California in 1982 with a PhD in Quantitative Analysis and Psychology.

Marian spent thirty-two years at AT&T Bell Laboratories, where she explored and built technologies which laid foundations for communicating via the modern internet. She has been awarded over 200 patents, almost half of which are related to voice-over-internet-protocol (VoIP) - the standard which defines the sending and receiving of voice, text and video data digitally rather than over a phone line (most notably, patent number US 7,599,359). Many modern programs still rely on this underlying technology, including Microsoft Teams and Zoom. Also notable is her invention to allow people to send donations via text, which brought more than 43 million USD in relief to the 2010 Haiti

Earthquake (patent number US 7,715,368). Prior to her move to Google, Marian led a team of over 2,000 engineers as Senior Vice President of Research and Development at AT&T, where she led development, quality assurance and product implementation.

Marian continues to innovate as the current Vice President of Engineering at Google, leading the development of responsible generative AI. In this role, she continues her work at the forefront of innovation. She has continued add to her list of inventions, with a publication awarded to her as recently as April this year (patent number US2023124288A1).

Throughout her career, Marian advocated for racial justice and widely encouraged women and young girls to pursue careers in engineering. She has a long list of accolades, most notably her induction into the National Inventors Hall of Fame in 2021, one of only two black women to do so.

You can find out a bit more about Marian by reading or listening to her USPTO interview here: <https://www.uspto.gov/learning-and-resources/journeys-innovation/audio-stories/positively-connected>

Thank you to everyone who took the time to read about the black inventors and pioneers highlighted this month.