Einstein@Home is a public volunteer computing project to search for gravitational waves from pulsars, using data from the LIGO and GEO detectors. It is one of the world's largest supercomputers, currently delivering about 45 Tflops of CPU power from approximately 100 000 users in over 150 countries. In this talk, aimed at physics and computing students, I explain how Einstein@Home searches for gravitational waves and describe some of the early (negative) results of our search.