Over the past few years, a number of groups using data from NASA’s space-borne Fermi LAT instrument have identified excess gamma-ray flux toward the inner 1° of the Galactic Center (GC), with an even larger significant excess within 0.2° degrees. At present there are two leading candidates for this excess: dark matter annihilation and a population of unresolved millisecond pulsars (MSPs). We are currently developing dedicated instrumentation to carry out a sensitive search for the pulsars in this region of the galaxy using a newly developed front end and receiver on a Deep Space Network large diameter antenna in Australia. In this presentation, we will provide an overview of the challenges encountered with pulsar searches at the GC region and a summary of previous and ongoing efforts to survey this region with radio telescopes. We will also provide preliminary results from our recent observations of the GC region at 2 and 8 GHz and will conclude with prospects for detection of perhaps hundreds of pulsars in this region with new generations of radio telescopes now under construction.