Neutron stars remain among the most exotic objects in the universe. Despite improved observational capabilities, their surface properties remain uncertain. Multi-wavelength spectra can, in principle, reveal their atmospheric compositions and angular diameters, and constrain their interior equation of state. We will report here on the brightest and nearest isolated neutron star, RX J185635-3754. The Chandra LETG spectrum reveals a featureless continuum. Extrapolations of a simple blackbody fit to the X-ray spectrum underpredict the observed UV/optical fluxes. The observed spectral energy distribution can be fit with either a two blackbody model or a magnetized stellar atmosphere. Low level pulsations appear to be present. We will discuss implications for the radius and age of this star, and will conclude that there is no need to invoke exotic surface physics: RX J185635-3754 is a half million year old pulsar.