In this bachelor thesis, we analyze chromospheric activity of two K giant stars, HD 187878 and KIC 3526061, which have been monitored for the past 10 years and have shown variations in their radial velocities that could be caused either by a star's companion, a yet to be discovered type of stellar oscillations or a modulation due to stellar surface features as a result of stellar activity. We explain the physics and theory behind the measurements and we apply it directly to observed data. After the procession of data, we look for periodicities and discuss the results.