

Point processes describe random point patterns in space. One of their most important characteristics is the intensity function. Furthermore, additional information about the surveyed area, so-called covariates, is often available for point processes. We derive a key formula for the function that describes the relation between the intensity function of the point process and the covariate. Based on this formula, we find its kernel estimate and formulate relations for the mean and variance of the estimate. We use simulation experiments to verify the accuracy of the kernel estimate.