

MODELING THE HUMAN INATTENTION DRIVING A CAR

Danilo Chavez G., Emanuel Slawinski, Vicente Mut *

* Instituto de Automtica (INAUT). Universidad Nacional de San Juan.
Av. Libertador San Martn 1109 (oeste). J5400ARL. San Juan,
Argentina (e-mail: dchavez, slawinski, vmut@ inaut.unsj.edu.ar).

Abstract: This paper proposes a method to measure the effects of the driver's inattention. In addition, the driver inattention is associated with a time delay defined such that it produces a similar effect on the car motion. This interpretation will allow use the classic tools present in the control theory of delayed systems in the case of a driver maneuvering a car to follow a path taking into account his/her possible inattention. Experimental results are shown where a user drives a car simulator by a given road while the driver's inattention is measured online.

Keywords: driver's inattention, path following, time delay
