An Expert System to Facilitate the Uniform Administration of Justice in Criminal Cases

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Abstract

As an attempt to facilitate uniform sentencing in the criminal justice system of the Korean Judiciary, we have developed an expert system which determines sentences for traffic(vehicular) offenses described in chapter 268 of the Korean Criminal Code. Through interviews and discussions with judges, we have selected the main factors based upon which respective sentence is determined. Next, on that ground we have established key facts of each main factor, and then have embodied the reasoning process in imposing a sentence. In addition to judges, professional knowledge and experience of medical doctors, police officers, and insurance experts are reflected in this system. The expert system developed is a kind of factor comparison model and normative model.

Key words: *Expert System, Legal Reasoning, Criminal Penalty, Rule-Based System, PROLOG*