FORENSIC EXAMINATIONS OF DIGITAL STORAGE MEDIA

The primary assumption of this scientific dissertation is to present and characterize forensic examination of digital evidence by experts in criminal proceedings, with particular emphasis on the issues related to the correctness of documenting the course of the examination by experts.

The research goals were as follows: to present the specific aspects of cybercrime from a forensic perspective, to present the characteristics of digital storage media and their contents in criminal proceedings based on analyzed expert opinions, to describe the stage of examination, analysis, reporting and presentation of digital evidence, to determine the methods of documenting the activities performed by experts, defining technical constraints in expert research and their impact on expertise.

The author conducted a query of court and prosecutor files, on the basis of which he selected a research sample of 287 files.

The analysis of archival data focused mainly on the research of computer forensics experts in criminal cases.

Quantitative research was conducted using a research questionnaire containing 32 questions.

The results of the conducted using quantitative research were documented and presented in a descriptive form using tabular summaries and charts for individual research results.

The author discussed the case studies of ten selected criminal cases in which the court, prosecutor or police officer appointed computer forensics experts.

The dissertation also discusses the use of best practices by experts, the use of methodologies developed in science, and provides examples of errors encountered in forensic examinations.

The impact of tactics in identifying and collecting digital evidence on forensic expertise is also described.

The results of the quantitative and qualitative research, along with their implications for the main research assumptions and scientific hypotheses, are thoroughly examined. This scientific dissertation contains a set of postulates for educating computer forensics experts.

The author has formulated precise recommendations to enhance the skills of judges and prosecutors in analyzing computer forensics expertise. The summary of the dissertation outlines proposed changes to the law on forensic experts and regulation of forensic specialized laboratories.