# Development and research of a multiagent soft and hardware system for human posture recognition

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**Abstract.** There are various approaches to the development of human nonverbal behavioural features recognition and description systems. Posture is an informative feature of nonverbal behaviour and, consequently, its objective registration, measure and description is necessary for psychiatrists, psychologists and security experts. In this work a multiagent soft and hardware system for human posture recognition and description is researched and developed as a part of the general nonverbal behaviour recognition and description problem. The semantic processing agent is developed using OWL, the skeleton recognition and tracking Kinect-based agent is examined, the linear and nonlinear data processing agent is also researched and developed.

**Keywords:** nonverbal behaviour recognition, posture estimation, Kinect, ontology, multiagent systems

Full text will be available on http://engbul.bmstu.ru/rub/457859/index.html