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Agentgeom: a multiagent system for pedagogical support in geometric proof problems.

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Summary: This paper aims, first, to describe the fundamental characteristics and workings of the AgentGeom artificial tutorial system, which is designed to help students develop knowledge and skills related to problem solving, mathematical proof in geometry, and the use of mathematical language. Following this, we indicate the manner in which a secondary school student can appropriate these abilities through interactions with the system. Our system uses strategic messages of the agent tutor in an argumentative process that collaborates with a student in the construction of a proof.

Classification: G40 E50 U50

Keywords: artificial tutorial system; multiagent system; pedagogical support; proof in geometry; proof problem; appropriation; interactions

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