Towards a mechanical geometer

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Abstract:

My talk will report recent work on the automated discovery of properties in elementary geometry. A prototype system is being currently implemented on top of GeoGebra. The method for discovering new results from a given construction is symbolic, providing them with mathematical rigor and certainty. We will describe some generalities about the "mechanical geometer" and will end reflecting on some of the many challenges and applications it poses, in the educational system and beyond.