

Will computers prove theorems?

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Today we have ChatGPT. In ten years' time will we have a machine where you can type in the statement of the Riemann Hypothesis, press a button, and out pops a correct proof? My guess is no. However in ten years' time will we have machines which can give humans mathematical ideas? Will we have interactive mathematics papers where you can choose the level of detail you want to see in a proof? Will we have machines which understand the state of the art in mathematics? Will mathematicians be being helped by computers in new ways? My guess is that these things are not out of the question. I'll talk about recent developments in AI and in theorem proving software which make me cautiously optimistic.