

No.10

Lean and AI for Mathematics

Jeremy Avigad

Carnegie Mellon University

In recent years, there have been considerable advances in computational technologies that support mathematical reasoning. These include digital proof assistants, symbolic automated reasoning tools, and machine learning.

Among proof assistants, Lean has rapidly gained prominence in the mathematical community. It has been used to formalize important contemporary results and serves as a platform for the development of AI. In this talk, I will situate Lean in the landscape of AI for mathematics and show you what it is like to prove theorems in Lean.