Proof Verification with Lurch

Kenneth G. Monks University of Scranton monks@scranton.edu

Would your students benefit from an easy-to-use, open-source, web-based word processor that could check their assigned mathematical proofs? In this talk we introduce *Lurch*, our software project designed specifically for this purpose. We will explain how you can use this software and accompanying course materials, and customize it for your own purposes. While existing proof verification tools like Lean, Isabelle, Coq, and Mizar are powerful and effective, they often have steep additional learning curves and can be difficult to customize. We will explain how the custom *Lurch* validation algorithm overcomes these challenges, and pose some questions for future work.

Additional information is available at lurch.plus.