

Peer Review

Review of: "WebRISC-V: A 64-bit RISC-V Pipeline Simulator for Computer Architecture Classes"

Saumya Patel¹

1. Faculty of Science, University of Alberta, Canada

As a student who has studied RISC-V architecture, I found this paper and the WebRISC-V tool highly relevant and potentially very helpful for learners. The simulator's focus on cycle-by-cycle execution, pipeline stalls, and hazard detection directly addresses the areas that often confuse students, myself included. I especially appreciated the use of the Patterson/Hennessy model, which aligns with what many courses already teach and makes the tool easier to integrate into the curriculum.

The paper does a good job of explaining the tool's features and educational intent, but it falls short in offering any real-world validation. I would have liked to see data on how students actually performed after using the tool, such as some metrics or surveys showing its impact on learning outcomes. Also, considering it's a browser-based tool, there's no mention of performance details, how it runs on slower networks, or on low-end devices, which is critical for accessibility in diverse educational settings.

In short, this is a solid contribution to computer architecture education, but it would be much stronger with empirical results and performance insights to back it up.

Declarations

Potential competing interests: No potential competing interests to declare.