Undergraduate Honors Thesis Defense

Simulating a Pipelined CPU

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Abstract: The CS355 course in Computer Architecture teaches both entry-level and advanced pipelined CPU technology. For most of the computer components discussed in lectures, the course uses a circuit simulation program that allows students to gain an interactive experience with basic computer technology. However, the course has always lacked a simulation program for the pipelined CPU. Due to the complex nature of pipelining and the success with using the simulation software for other circuits, we have developed two versions of the pipelined CPU using the simulation program. By offering students a hands-on understanding of instruction pipelining, our simulated processors will greatly enhance the course.

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Mathematics and Science Center: W303

Mathematics and Computer Science
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