Sequential Processes

Problem 1

Start with the definition of Buff\(^{(2)}\):

1. Define Buff\(^{(3)}\), that is, a boolean buffer with capacity three.
2. Modify the defining equations Buff\(^{(2)}\) of to allow the stored values to be transmitted in either order.

Problem 2

The idea of a counter generalizes smoothly to a stack. Define a process to represent a stack of boolean values, with states \(Stack_s (s \in \{0, 1\}^*)\) and actions \(push_i, pop_i (i \in \{0, 1\})\) and \(empty\).

Submission deadline: Thursday, February 12, 2004, 12:40 p.m.