## Session 37 Strategy 5: Trade Space for Time

## **Lecture Summary**

Easier to first introduce Horspool's algorithm operation and compare to brute-force matching, then explain its design.

## Horspool's String Matching Algorithm

- 1. Basic match procedure
- 2. Pattern shifts
- 3. Input enhancement: the shift table
- 4. The algorithm, example, and efficiency + compare to brute-force matching

## **Session Exercise**

- P25. Code Horspool's algorithm (starter code in assignment page). Use Firebug to trace through the textbook example in order to learn how the algorithm works. Use your code to verify answers to textbook exercises and practice for tests.
- **Exercise 7.2 •** 1, 2, 3, 4, 5
- **Reading List**
- **2** 7.2
- **Keywords**