Session 34
Strategy 4: Transform-and-Conquer

Lecture Summary

More Transform by Representation Change

1. Polynomial evaluation problem: revisit exponentiation
2. 🗝 Horner's rule key insight
3. Binary exponentiation (left-to-right algorithm only)
4. Why are these algorithms so efficient?
5. Results summary and comparisons

Session Exercise

P23. Write code to implement the pseudocode of 🕮Exercise 6.5:1. Check your answer for that exercise empirically (insert code to count number of multiplications and additions).

🕮 **Exercise 6.5** • 1, 4, 7a 🛠 9

Reading List

🕮 6.5

Keywords

[Polynomial] degree, exponentiation, [polynomial] evaluation, successive [squaring], synthetic [division]