

Design and Analysis of Algorithms

with respect to various notions of performance:

worst-case,

average-case,

expected-case,

amortized;

competitive ratio,

approximation ratio etc.

(sequential) runtime

memory

parallel runtime

communication volume

#processors

...



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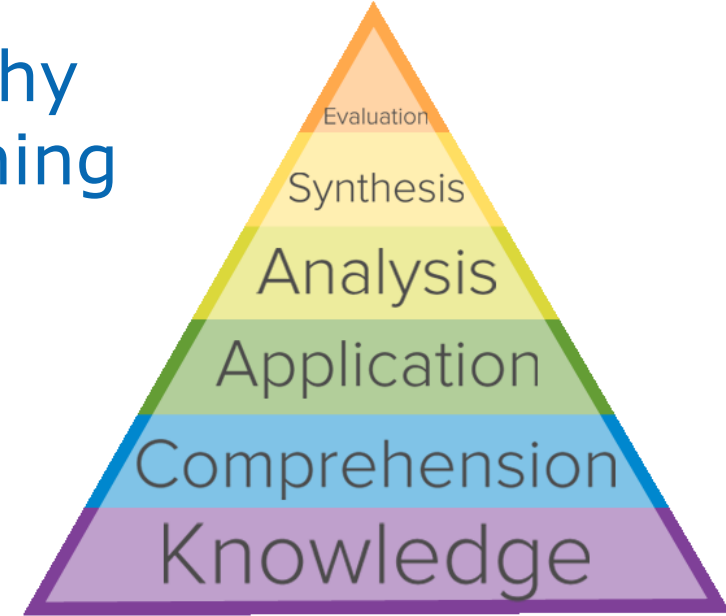
1. Introduction
2. Binomial Heaps
3. Union-Find
4. Randomization
5. Online/Competitive
6. Complexity Theory
7. Memory/Parallel Time
8. (Extra/Miscellaneous)

§0 Course Overview & Goals

Martin
Ziegler

Bloom's Hierarchy of cognitive learning

Konrad Lorenz:
(Nobel Prize 1973)



- *What is thought is not said*
- *What is said is not heard*
- *What is heard is not understood*
- *What is understood is not believed*
- *What is believed is not yet advocated*
- *What is advocated is not yet acted on*
- *What is acted on is not yet completed*