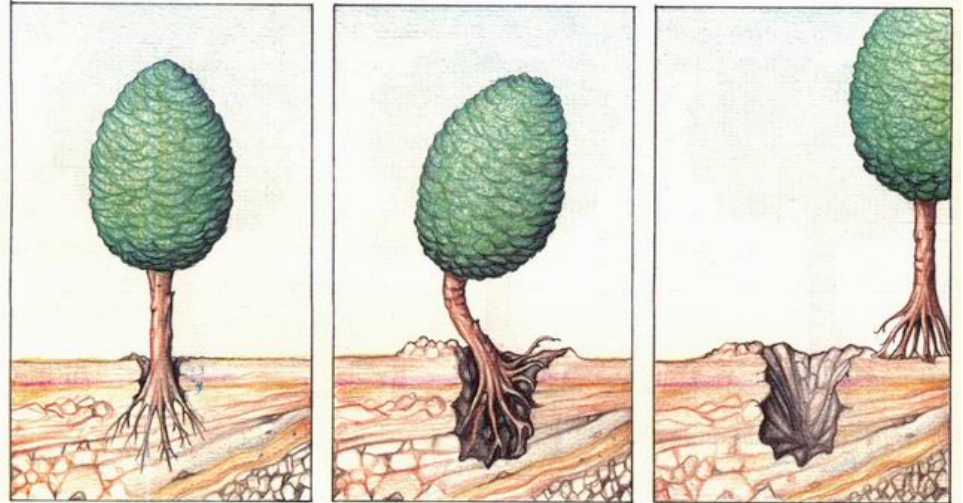


3-02E0033322



taproot

fibrous roots

buttress roots

CS 598 JGE
Spring 2011

Advanced Data Structures

Jeff Erickson

TuTh 12:30–1:45, 203 Transportation

<http://www.cs.illinois.edu/~jeffe/teaching/datastructures/>

This course will survey important developments in data structures that have not (yet) worked their way into the standard computer science curriculum. The precise topics will depend on the interests and background of the course participants. Potential topics include self-adjusting binary search trees, dynamic trees and graphs, persistent data structures, geometric data structures, kinetic data structures, I/O-efficient and cache-oblivious data structures, hash tables and Bloom filters, data structures that beat information-theoretic lower bounds, and applications of these data structures in computational geometry, combinatorial optimization, systems and networking, databases, and other areas of computer science.

Students in all areas of computer science and related disciplines are welcome, including algorithmically mature undergraduates. CS 573 is recommended as a prerequisite, but not required; specific background material will be introduced as needed.