

Das Algorithmen Visualisierungstool

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Motivation - Why go2algo?

- Problems in understanding fundamental algorithms and data structures
 - comprehensive introduction should be part of every informatics education
- Problems in teaching concepts of algorithms and data structures
 - presenting an abstract state with optical means
 - renounce from details to make it easier to understand the basic concepts
- Hardly any useful tools
 - heterogeneous systems that often lead to confusion
 - "quick and dirty" solutions
 - disregard of technical and pedagogical axioms
 - inconsistent and/or incorrect
 - no documentation or explanatory material
 - continuous visualizations without any controlling mechanisms

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Arguments - Therefore go2algo!

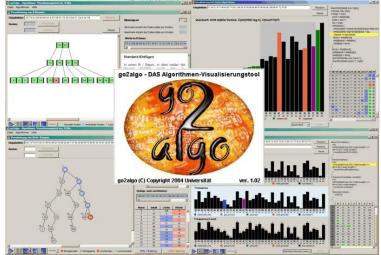
- · Benefits of visualizations in general
 - improved human-machine-interface
 - processing of raw data
 - presenting complex processes in a simple way
- · Benefits of the visualization tool
 - many common algorithms joined in one tool
 - understandable and consistent design conventions
 - continuous and discrete visualization flow
 - control in style of media player (step-by-step, speed adjustable, ...)
 - good and helpful documentation (static, dynamic, algorithm-dependent)
 - pseudo-code is displayed and highlighted while execution
 - correctness
 - full screen mode for teacher to show visualization over a beamer

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Screenshot – Want to see more?



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