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## Improving Dynamic Programming

By

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### **Abstract:**

Dynamic Programming (DP) is a ubiquitous optimization tool. The basic DP paradigm is very well known. It is taught to most beginning computer scientists and is employed in most all application areas that use computers. What isn't as well known is that there is a toolbox of techniques, old but still evolving, that permit improving both the time and space complexity of many dynamic programs. This talk will provide an introductory survey of these techniques.

### **Biography:**

Mordecai Golin is a Professor in the Department of Computer Science and Engineering at the Hong Kong University of Science and Technology. After receiving his doctorate from Princeton University in 1990, Dr Golin worked as a researcher in the Projet Algorithmes of the Institut National de Recherche en Informatique et en Automatique (INRIA) in Rocquencourt, France. He has also been a visiting researcher at the Max-Planck-Institut fur Informatik in Saarbrucken, Germany, INRIA-Sophia in France, AT&T Labs-Research, and DIMACS. His research interests are the theory, design and application of algorithms, computational geometry, information theory and combinatorics.