Record Nr. UNISA996465799903316 Visualization in Programming [[electronic resource]]: 5th **Titolo** Interdisciplinary Workshop in Informatics and Psychology Schärding, Austria, May 20-23, 1986 / / edited by Peter Gorny, Michael J. Tauber Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-48004-8 Edizione [1st ed. 1987.] 1 online resource (X, 222 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 282 Collana 005.1 Disciplina Soggetti Software engineering Application software Artificial intelligence Computer graphics Software Engineering/Programming and Operating Systems **Computer Applications** Artificial Intelligence Software Engineering Computer Graphics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Bibliographic Level Mode of Issuance: Monograph Note generali Nota di contenuto Visual languages: A tutorial and survey -- The gestalt analysis of programs -- Visualizing of program structures: Support concepts and implementation -- The role of mental models in programming: From experiments to requirements for an interactive system -- Learning structured diagrams — effect of mathematical background, instruction, and problem semantics -- How people comprehend unknown system structures: Conceptual primitives in systems' surface representations -- On visual interfaces and their conceptual analysis -- On the visualization of design notions, of notion instantiations, and of structural relationships in a design data base realized as a semantic net -- On the design of a graphical transition network editor -- Reference and data construction in boxer -- Solving interpolation problems with

LOGO and BOXER -- Visual languages and the GARDEN system --

Compiler aspects of an environment for programming by demonstration.

## Sommario/riassunto

This volume presents a selection of contributions from the Fifth Workshop on Informatics and Psychology at Schärding, Austria, May 1986, which focused on "Visual Aids in Programming". The lectures give a broad view of the state of the art in this new field of research and development spanning Cognitive Science, Informatics and Ergonomics, which draws its impact from the growing need for a deeper understanding of complex program structures and for better program design. The topics include the visualization of program structures, the discussion of psychological aspects, design problems of visual interfaces, and present implementations.