

# Lecture Notes in Computer Science

Edited by G. Goos and J. Hartmanis

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P. Gorny M.J. Tauber (Eds.)

## Visualization in Programming

5th Interdisciplinary Workshop in  
Informatics and Psychology  
Schärding, Austria, May 20–23, 1986

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## Preface

This volume presents a selection of the contributions from the "Fifth Workshop on Informatics and Psychology" at Schärding, Austria, May 1986, which focussed on "Visual Aids in Programming". The workshop was organized by the Österreichische Computergesellschaft (OCG) and the German Chapter of the Association for Computing Machinery (ACM).

The lectures give a broad view of the state of the art. In his survey CHANG introduces the reader to this new field of research and development between Cognitive Science, Informatics and Ergonomics, which draws its impact from the growing needs for a deeper understanding of complex structures of programs and for better program design. The following papers (LUTZE, STELOVSKY/ACKERMANN/ CONTI) analyze program structures with the aim of visualization. The psychological aspects are discussed by ACKERMAN/STELOVSKY, VAN DER VEER and by ROHR. The last group of papers is concerned with design problems of visual interfaces (TAUBER, HOFFMANN) and present implementations (McDAID/ GUEST, diSESSA, SCHWEIKER/MUTHIG, REISS and RUBIN/REISS/GOLIN).

The editors have refrained from giving a survey of a very important part of the Schärding workshop: the discussions, which traditionally occupy about two thirds of the program. But we owe thanks to all participants, who have contributed to these discussions with their ideas and experiences.

Finally we express our gratitude to two institutions on either side of the Austrian/German border: to the Universität Passau for the support of the workshop and to the Town of Schärding for kindly hosting the conference.

Oldenburg and Pittsburgh

Peter Gorny

Michael Tauber

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