

Bauer, Friedrich Ludwig; Möller, Bernhard; Partsch, Helmut; Pepper, Peter
Formal program construction by transformations - computer-aided, intuition-guided programming. (English) [Zbl 0664.68017](#)
IEEE Trans. Softw. Eng. 15, No. 2, 165-180 (1989).

The systematic software development methodology of the Munich project CIP (computer-aided, intuition-guided programming) is described. There are two parts of the project: the wide spectrum language CIP-L [*F. L. Bauer* and the CIP Language Group, Lect. Notes Comput. Sci. 183 (1985; [Zbl 0572.68010](#))] and the program transformation system CIP-S [*F. L. Bauer* and the CIP System Group, Lect. Notes Comput. Sci. 292 (1987; [Zbl 0645.68004](#))]. A program is derived from a formal specification by manageable controlled transformation steps through levels inside the same wide spectrum programming language. The abstract data types and algebraic method is used for the specification.

Reviewer: G.Grigas

MSC:

[68N01](#) General topics in the theory of software
[68P05](#) Data structures

Cited in **3** Documents

Keywords:

algebraic specification; software development methodology; wide spectrum language; program transformation system; abstract data types

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