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RIO DE JANEIRO
BRASIL

Pontifícia Universidade Católica do Rio de Janeiro
Rua Marquês de São Vicente, 209 — ZC-20
Rio de Janeiro — Brasil

005.106

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PREPRINTS

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PROFESSORS

C.J.P. LUCENA
W. BRAUER
N. MACHADO
A.L. FURTADO

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TOWARD A SYSTEM'S ENVIRONMENT FOR
COMPUTER ASSISTED PROGRAMMING

Carlos J. Lucena and Donald D. Cowan

Abstract

This report describes the design approach being used for the specification of a system's environment for computer assisted programming. The proposed system is aimed at supporting some major results in programming methodology such as specification and correctness techniques, techniques for program modularity, the representation of abstract data types and program portability and efficiency. Instead of providing a list of the desirable features for a system with the above general goals the authors attempt to present a sound logical argument on why and how the environment's components are interrelated. The proposed system attempts to amalgamate a number of apparently diverse notions related to specification and programming language mechanisms.