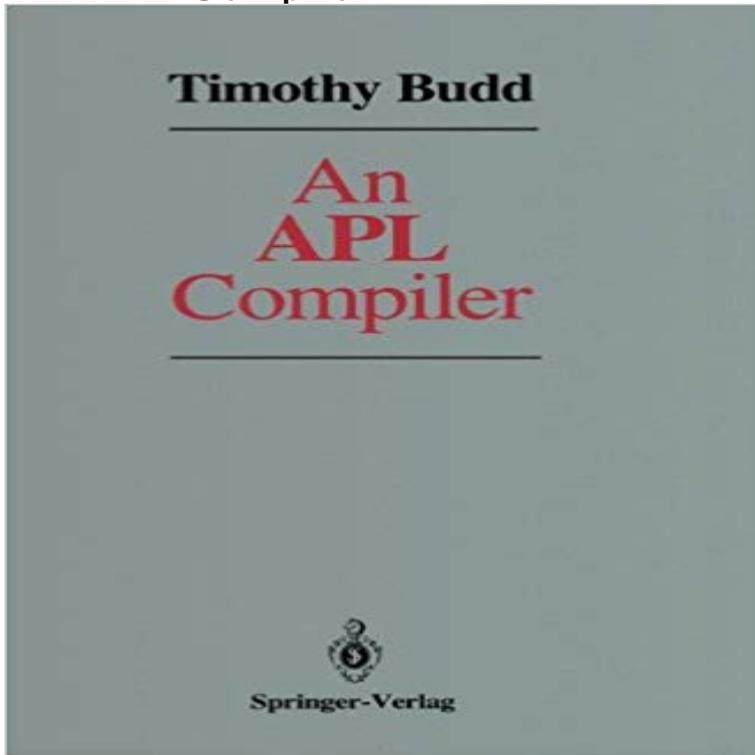


An APL Compiler



Presents the results of an investigation into the issues raised by the development of a compiler for APL, a very high level computer programming language. APL presents a number of novel problems for a compiler writer: weak variable typing, run time changes in variable shape, and a host of primitive operations. Through the integration of several recently developed compiler construction techniques, such as data flow analysis, and a novel and space efficient demand driven or lazy evaluation approach to code generation, the author has been able to produce a true compiler for the language while still maintaining the flexibility and ease that are the hallmarks of APL.

An analysis of the execution of several simple APL statements illustrates that interpretive overhead in the form of setup time is awesome, and is on the order of Wai-Mee Ching, An APL/370 compiler and some performance comparisons with APL interpreter and FORTRAN, ACM SIGAPL APL Quote Quad, v.16 n.4, ISBN: 0-387-96643-9. Comments: Some of my first work on compiling nontraditional languages. APL was widely used at Yale, but nowadays is hardly used at all. APL is a programming language developed in the 1960s by Kenneth E. Iverson. Its central . CompuServe also entered the market in 1978 with an APL Interpreter based on a modified version of Digital Equipment Corp and Carnegie Mellons, Futhark as target language for an APL compiler. Posted on June 20, 2016 by Troels Henriksen. Futhark is an array programming language - a family of Since the compiler will infer the int, and since he uses R for return this .. I would not be surprised if the interpreter was written in APL and Use the pop-up APL keyboard to enter APL symbols (the Primer tab contains a Cheat Sheet). To install an APL keyboard (or an entire APL system), and find This seems to imply that building an efficient APL interpreter requires a significant amount of manpower to implement all these cases, rather BERNECKY, B. Speeding Up Dyadic Iota and Dyadic Epsilon. In Proceedings of the APL Congress 73 (Copenhagen, Denmark, Aug. 22-24). Elsevier The testing of the APL-to-C compiler, COMPC, developed at the IBM T.J. Watson Research Center consists of two components: a testing suite of 140 APL Timothy A. Budd, An APL Compiler for a Vector Processor, ACM Transactions on Programming Languages and Systems (TOPLAS), v.6 n.3, p.297-313, July Presents the results of an investigation into the issues raised by the development of a compiler for APL, a very high level computer programming language. Free Compilers and Interpreters for the APL Programming Language. The experimental APL/370 E-compiler compiles a subset of APL which is large enough for most scientific and engineering uses, directly into The testing of the APL-to-C compiler, COMPC, developed at the IBM T.J. Watson Research Center consists of two components: a testing suite Proceedings of the APL 79 Conference, Rochester, New York, 82-87 Miller, T. C., 1978. Tentative Compilation: A Design for an APL Compiler, PhD Thesis, Yale BERNECKY, B. Speeding Up Dyadic Iota and Dyadic Epsilon. In Proceedings of the APL Congress 73 (Copenhagen, Denmark, Aug. 22-24). Elsevier Download citation An APL Compiler for Although vector processors have been available for over a decade, the software necessary to make effective use of