



## A High Level Real-Time Programming Language: October, 1984 (Classic Reprint)

By Ernest Davis

Forgotten Books, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Excerpt from A High Level Real-Time Programming Language: October, 1984 Introduction We present here an outline of a robot programming language, COAL (COntinuous Action Language), together with a formal semantics. COAL is designed to support an abstraction of programming which can operate in a continuous fashion. Variables can change values continuously over time, execution can be instantaneously interrupted in response to an event, and so on. Such constructs must be implemented in terms of discrete steps, but COAL expresses the idealization behind the implementation, in the way that real arithmetic is the idealization behind floating point arithmetic. In this paper, we will describe the basic elements of COAL, define a formal semantics, and present a few typical programming examples. We have not yet addressed the question of implementation. 2. Overview of COAL 2.1. Variables: COAL supports at least the following types of variables: booleans, integers, real valued vectors (elements of  $R$ ), continuous functions from  $R$  to  $R$  (called real functions), and integer semaphores. Certain global variables will be bound to the input and output devices...



[READ ONLINE](#)  
[ 9.42 MB ]

### Reviews

*It is an amazing ebook i have possibly study. Indeed, it is engage in, nevertheless an amazing and interesting literature. I am just very easily can get a pleasure of reading a published book.*

-- **Christopher Ferry**

*Absolutely essential read publication. It is amongst the most incredible book i have study. Your lifestyle period will be convert when you full reading this ebook.*

-- **Dr. Meaghan Streich V**