

mitted by the persons concerned, but had not yet been detected.

Yours faithfully,

A. PARKIN

School of Mathematics Computing & Statistics  
City of Leicester Polytechnic  
P.O. Box 143  
Leicester LE1 9BH  
7 October 1975

*Mr. Allen replies:*

The point made by Mr. Parkin is a valid one, but in practice fidelity guarantee policies for all but the smallest risks are issued to cover all employees, and would include computer personnel. It is, therefore, likely to be more a problem for the insurer than the insured, although the computer user would be well advised to check that the insurance does cover computer staff.

*To the Editor  
The Computer Journal*

Sir

I am looking for a computer program written in FORTRAN to solve large scale capacitated network problems. I have noted the ALGOL program published in *The Computer Journal*, Vol. 16, August 1973, but would be most grateful if you would send me, or refer me to a FORTRAN equivalent thereof.

Yours faithfully,

B. JOFFE

B. L. Joffe Associates (PTY) Ltd.  
49a Garden Road  
Orchards  
Johannesburg 2001  
South Africa  
25 November 1975

*To the Editor  
The Computer Journal*

Sir

I read with interest R. A. Earnshaw's article entitled 'Is APL a viable

programming language?' in Vol. 18, No. 4 of the *The Computer Journal*. However, the conclusion attributed to Streeter (1972) that execution of APL programs usually costs a factor of ten to a hundred times more than equivalent FORTRAN or PL/1 compiled program code hardly does justice to the interpretive efficiency of current APL processors.

My own substantial experience in writing APL systems and providing support to client users of the Atkins Computing time-sharing service has led me to a rather different conclusion. APL execution costs compare very favourably with FORTRAN compiled code. In fact, in a series of bench-mark tests involving large matrix operations, the APL code was actually faster than equivalent FORTRAN code—Mr. Earnshaw indicated why this might be possible in Section 6.1(g) Flexibility in execution.

I fully endorse Streeter's finding that program development time is considerably reduced using APL—a factor of three vis-a-vis FORTRAN or PL/1 is indicated. Even more impressive is the reduction in development computer costs that might be expected; our own experience, a tenfold reduction is not unusual. The same order of savings are to be expected for program maintenance or enhancement.

Taking both of these factors into account, the development of APL systems for long-term usage becomes a very attractive proposition, and one to which we at Atkins Computing are increasingly drawn. Moreover, the base of APL applications implemented on our installation includes not only the 'accepted' scientific and technical areas, but also those within the commercial sphere.

In fairness to Mr. Earnshaw, I note that the article was submitted over a year ago, and that he acknowledges the implementation of many enhancements (including 'a faster processor'), which presumably were not available when the article was researched. I hope that my letter rectifies somewhat the disservice to APL.

Yours faithfully,

A. D. CROSSLEY

Atkins Computing Services Limited  
Woodcote Grove  
Ashley Road  
Epsom  
Surrey KT18 5BW  
27 November 1975

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## Algorithms supplement

We are sorry to have to announce that, owing to pressure of work, Mr Shepherd has found it necessary to relinquish the editorship of the supplement. We are pleased, however, that the task is to be taken on by Professor Paul Samet.

To smooth the transition from one editor to another Mr Shepherd has agreed to complete the processing of all material in the pipeline; contributors should continue to send communications regarding current material to him.

**New contributions should be sent to:**

**Professor P A Samet, Director, Computer Centre, University College London, 19 Gordon Street, London WC1H 0AH.**

Mr Shepherd has edited the supplement for over four years. During this time it has continued to develop and we are most grateful for the time which he has devoted.