Computer Science Presentations

PROPER PLACEMENT DECISIONS. As in the mathematics projects this category is expository in nature of its presentations and seldom involves the controlled experiments required of science projects. Judges, sponsors and students must realize that projects that do have data accumulated in a controlled experiment where the computer's role is merely to serve as a tool to analyze the data, draw pretty graphs, and do statistical conclusions *DO NOT BELONG IN THE COMPUTER SCIENCE* category. Such projects more properly fit the judging criteria for the specific science field such as biology or physics in which the project was done and should be transferred there before being judged.

The PJAS State Judging Committee feels that a small modification of a pre-existing (canned) program is not a suitable project to present in our competition. Pre-existing programs may be used, however, if they are a small part of the student's own work.

A wide disparity exists between schools in their offerings of formal computer science courses. It is the task of the judges to identify students who have gone beyond the standard opportunities provided by their schools.

STATEMENT OF THE PROBLEM

a) Is the objective of the project clearly stated?

b) Does the problem chosen have relevance or practical application in today's world?

c) Did the student use appropriate computer vocabulary?

d) Did the student show depth of understanding of relevant programming concepts and principles?

e) Does the project entail creative thinking in approach techniques?

METHODS

a) Was there unity, coherence and inherent logic in the sequence of the presentation?

b) Does the student follow accepted procedures, using either structured programming or object-oriented programming? Is the underlying logic sound?

c) Did the student explain the project design using a high level diagram?

d) Did the student include an explanation of difficult, unique and/or significant section(s) of the program?

FULFILLMENT OF PURPOSE

a) Did the student show the results of his work? Was the objective obtained?

b) Does the student have a quality product?

c) Did the project include exceptional features and/or coding?

d) Does the presenter know of areas for further expansion or improvement of the project?

PRESENTATION

The presentation should, preferably, be in the form of a free talk employing good oral communication skills. The time restrictions in the rules necessitate planning and rehearsal.

a) Is the talk well organized and flowing in a logical pattern?

b) Do the audiovisual aids enhance the audience's understanding?

c) Is the student's competency with the principles such that he can answer questions with clarity, and elaborate where necessary to make a point?

d) If the student is employing special medium, such as a VCR or computer screen, is its value to the speech significant? Was its use limited to less than 10% of the total speech?

It is acceptable for a student to show key parts of code line by line. However, the presentation should not consist of a student explaining his/her program line by line. A high-level method should be used instead.

JUDGE'S OPINION

Evaluate the complexity and quality of the project with respect to the age and grade level of the student and the amount of previous experience with computers. Remember schools vary considerably in what computer offerings they can make available to students.