Preparation for the ACM Scholastic Programming Contest
At The University Of Calgary
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The U of C has done relatively well (most recent contest excepted) at the Mountain Region ACM contest, with one first place and three second place performances in the last four years. It would be fair to say that this surprises us as much as it does other, larger schools, and it is not certain that any particular approach on our part is responsible. We are always happy to participate, and are grateful for the chance to participate at the finals.

Students are selected for competition by polling instructors and examining assignments and student records. In addition, all students are made aware of the contest and of the team meetings by local E-mail. Calgary has a local high school contest, and lately these students have been trickling into the department as well. A list of interested or qualified students is prepared, and meetings usually being at the end of the winter session, or at the end of April. At this time team meetings are casual, and involve individual and small group drills on small problems. We use our instructional network of Sun workstations for these.

It is unusual to get more than a dozen students to come out to the meetings, and attrition takes 4-5 more by September when the meetings become weekly events. By this time the skills of the students is known, and team dynamics can be determined - students will now work in groups of three, although individuals can be moved between teams. We use a surgical team, with a titular 'leader' and designer, a programmer/coder, and a mathematician/algorithms person, although all of the members have skills in all areas.

By the time of the contest we usually have two full teams: one team which is our 'best', and who we hope will place well, and the second team, generally second and third year students, who are being groomed for later years and who are gathering experience. It has happened that the second team actually places ahead of the first, which can cause some difficulties on the trip home! Usually the two teams are, in fact, one team, and get along exceptionally well and compete in good spirits.

If one of the teams does well enough to compete in the finals, the drills resume about a month after the regional contest, and concentrates on Unix and VI environments with longer, rather than harder, problems. We all feel very much that simply going to the finals is winning - not often do undergraduates attend a real conference and see research results being presented.

We like to include one team member who has previously been to the finals. This person is not as likely to get flustered by the process, and is generally the team 'leader'.