U of L computing team captures fifth place in programming contest

The top University of Lethbridge team took fifth place in the recent Rocky Mountain Regional Programming Contest.

“Our top team solved the same number of problems as the top two University of Alberta teams and the top University of Calgary team, only losing to the other Alberta schools by penalty minutes,” says Dr. Howard Cheng, team coach and a professor in the Department of Mathematics and Computer Science. “We were certainly competitive against the other Alberta schools, the University of Saskatchewan and a number of larger American schools.”

The contest drew 73 teams from schools as far north as Edmonton and as far south as Arizona and New Mexico. The U of L entered four teams in total, with the remaining three teams performing well, despite it being the first competition for most of the team members.

The U of L top team, composed of Roderick MacCrimmon, who’s studying physics and computer science, and Josip Smolcic and Joshua Swidinsky, both fourth-year mathematics and computer science students, and other participants met regularly after classes and on weekends in the run up to the contest. They practiced on previous contest questions and attended special lectures where Cheng shared various strategies for solving problems.

At the competition, teams were given one computer and 11 real-world problems of varying difficulty. They were not allowed to communicate with their coach. In one problem, teams worked with a large dictionary of words and had to develop a program that could detect all typos where one letter of a word was missing.

“The program has to correctly give the answers in a few seconds so, if they’re not careful in how they do things, they might be able to write a program that’s not going to run in time and that would be considered incorrect. They must not only have a solution that’s correct in all the different cases, but also fast,” says Cheng.

Participating in such competitions gives students the chance to apply their learning to realistic problems and integrate their knowledge. Because each problem has to be solved correctly for the team to earn any points, students also learn to pay attention to all the details, think critically and proceed carefully.

“I had a lot of fun and I met a lot of new people,” says Smolcic. “I always liked puzzles and problem solving and you don’t get a lot of that in some courses. In a competition like this, you don’t know what’s going to be asked. You really have to think about it; it’s not so much about memorizing. I enjoy that a lot.”

“Besides the practical knowledge, I’ve learned interview skills, especially if they ask you to do a challenge during an interview and ask you to solve a problem they’ve had before. Knowing how to think fast definitely helps,” says Swidinsky.

Cheng explains many high-tech companies like Google and Facebook present candidates with similar problems during an interview to gauge their ability to solve real problems. Whether they are considering their eventual job prospects or not, both Smolcic and Swidinsky participate not only because it adds to their resumés but for the love of the challenge.

“I do it for fun and I would tell other students to try it to see if they liked it,” says Smolcic. “I had no idea such a thing existed until I got here and Howard asked me to compete.”

“I usually find if I get a super hard problem solved, it just feels really good,” says Swidinsky. “It’s definitely a confidence booster.”

The second U of L team, composed of Steven Deutekom, Liam King and Dustin Ward, finished in 26th place. The third team, with team members Dallan Atwood, Austen Oviatt and Mathew Richards, finished 60th and the final U of L team, Blake McLachlin, Amanda Munden and Ryan Pederson, came in 66th place.

“Considering eight out of 12 participants were competing for the first time, these results are excellent and show much promise for future competitions,” says Cheng.

Full results can be found online at Rocky Mountain Regional Contest.