The First High School Chapter: The Indiana Academy for Science, Mathematics, and Humanities



Sara Carlstead with David Brown and Jeff Irwin

In this edition of *Down the Road*, we meet the ACM student chapter of the Indiana Academy for Science, Mathematics, and Humanities (IASMH). This chapter is of interest not only for what they do (which is considerable), but for what they are: the first high school student chapter of the ACM. (The other high school chapter is Thomas Jefferson High School for Science Technology in Virginia.)

IASMH was established by the state of Indiana as a public, residential program for gifted junior and senior high school students. It is located on the campus of Ball State University, in Muncie, Indiana.

History

In the Fall of 1991, David W. Brown, an instructor and then interim-coordinator of Computer Science struck out to involve students at the Indiana Academy for Science, Mathematics, and Humanities (IASMH) in the Association for Computing Machinery (ACM). He encountered difficulties due to the fact that there was no precedent for high school chapters, nor a policy on letting high school students join university chapters.

The ACM chapter national headquarters suggested that Mr. Brown, contact Dr. Jim Nolen of Baylor University who at that time was Co-director of the ACM Student Activities Program. Nolen was extremely supportive of the concept of a high school chapter, and helped arrange for Brown and two IASMH students, Steve Gardiner (Carleton College) and Rachelle Schiffli (Rochester Institute of Technology), to travel to ACM CSC '92 to interact directly with ACM leaders and to promote the concept of a high school chapter.

After being asked to submit their CS curriculum, summary of their school, student body, and CS faculty, a small group of students were asked to attend the Big Event. At the Big Event, Jim Nolen was able to verify that the Indiana Academy had been issued the rights and privileges to establish the first high school student chapter of the ACM. In Indianapolis, at ACM CSC '93, Academy students were asked to rise and be recognized between two keynote speakers. Thirteen students and Brown attended.

The Chapter Now

The members of IAMSH's ACM chapter keep themselves busy with a wide variety of activities. Jeff Irwin says of the chapter, ``ACM has been very nearly like a `higher class' computer club to me. We go on tours of prestigious corporations, participate in research, and attend international conferences." Like most other chapters, they participate in programming contests and are planning one of their own. They publish a newsletter, the Coprocessor, which is a cooperative, yearly publication of the IASMH student chapter of the ACM and the IASMH Division of Mathematics and Computer Science sent to high schools and businesses around the state. They also have a lab assistant program that ``ensures the labs are in the best possible shape for the user community. The lab assistants are responsible for staffing, providing user assistance, supplying, and maintaining security in the two computer labs within the IASMH."

They also attend lectures given through the Ball State Computer Science department. They have organized a number of tours to computing corporations. The most recent tours include National City Bank, where they learned about fault tolerant computing, and The Associated Group, where they learned about networking.

In addition to these activities, the chapter actively participates in research and presents at national conferences. In 1993 and 1994 they had four technical posters on Computer Human Interaction at the SIGCSE (Special Interest Group Computer Science Education) technical symposium. At the same conference, they hosted a panel on the ACM's National High School Model Computer Science curriculum. The same year at the Big Event, they gave a presentation on the Coprocessor and entered one technical poster in the undergraduate poster competition. They also submitted two posters this year. Ryan Horner says of his involvement with the group researching computer mediated communications, ``This research gave me insight into more than just electronic games, word processors, and even beyond computer programming. It allowed me to see the psychology involved when people interact with computers."

The chapter currently has 15 members. 11 out of the 15 plan on majoring in computer science once they get to college. They feel that being a part of the ACM has helped them in many ways. Brian Beaty sees the ACM as a ``splendid opportunity for education. It opened doors to research that I [didn't know] existed. It helps provide students and professionals alike with a place they can always go to learn something new. As with the field of computer science, the ACM offers just as many different options with its various Special Interest Groups. These groups showcase the new technologies that are developed every day by corporations and students and let the world know exactly where the field of computer science is headed in the future." Jeff Irwin says, ``The opportunity to participate in research and learn about professions through tours and conferences has been invaluable to me. The experience I have gained will give me a head start in college and give me direction towards a profession. This is especially important to me at the high school level. I think high school chapters can better equip students with experience in a career involving computers without a major commitment."