Profiles of Computer Scientists

Bradley Hartman
Senior Systems Engineer
Walt Disney Imagineering
Glendale, CA

Education:
B.S. - Electrical Engineering with Computer Science Emphasis, University of Pennsylvania

Job Description:
Project Engineer in the Controls Department, dealing with ride and show controls for the theme parks. He is also in charge of project scheduling and financing.

Advice to Students:
"Work for both large and small companies to learn different ways of working…also network."

Video Transcript 1:
"It was a very interesting experience for me because it was a multicultural experience. I worked, actually, in the mostly French team that was a local team and then we had a mostly American team that came over from the United States. And we worked in conjuncture with each other with the language barriers and some of the other things and so on. And different styles of doing work. And it was very interesting from that respect. Americans were very get to the point, get it done, get it out the door, and the French spent a lot more time up front, probably doing analysis and so on. And I think the mix actually worked out very well because we got a good analysis up front and we also had the sort of the momentum to get the project done and get it out the door and get it working on time."

Interview:

In spite of the "big company attitudes" and the constraints of the long hours and extensive periods of travel, Bradley Hartman enjoys his work at Walt Disney Imagineering. He describes a recent project he worked on for Disney Land Paris, called Space Mountain: "It was a new project for Disney. We have a catapult system so that you basically get catapulted in the train from about zero to fourteen meters a second in less than two seconds. So you get about a G force going uphill. And it's the first electronically controlled catapult in a theme park in history that we're aware of, anyway. So that was a very interesting project with a lot of risk, and we had a lot fun doing that one. And the most exciting thrill was probably the first time we catapulted the train up the hill and everybody got to sit in it afterwards and try it to see how it felt."
Although many engineers would like to work for Disney, positions there are very competitive. Hartman advises students to get a breadth of experience before applying. "I would almost recommend working somewhere else first, with a company that does business with Disney, if you really wanted to get into Disney, and then use that as your way to come into the company." In his own case, Hartman had been working in France for some time when he joined the French team that was working on Euro Disney in Paris. From there, he moved back with Disney to the United States.

Hartman specifically advises students to work for both large and small companies to learn different ways of working. Large companies have bureaucracies, but they also have "a lot of people with a lot of experience and a lot of knowledge, so that, if you have a problem, there's always somebody that you can go find and talk to about it." It can be very rewarding to work with teams of such people. Small companies place more responsibilities and require more of individual engineers. At a large company like Disney, where schedules absolutely have to be met, small company experience teaches the engineer how to get work done "in a fairly expedient manner."

Hartman further advises students to network. "Our area is kind of specialized. There are not a lot of ride and show engineers out there at this particular point in time … And it's sort of a big family in certain ways, so people kind of know each other," not only within Disney but also at Paramount and Universal.

Another useful strategy to follow is to do a coop or internship. The coop need not take place at Disney, itself. Hartman interned at Hewlett Packard as a student and feels it was a valuable experience. He adds, "But we do have coops and interns that come into Disney. And sometimes that way is a very good way for you to (determine) if you like the company. And it's usually (a good opportunity) for them to see if they like you."