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RODRIC RABBAH: OK, great. So a lot of effort into making this course, and we hope you've had fun. It's been a lot of support from Sony, IBM, Toshiba. A lot of on demand help from people at IBM and Sony, trying to debug problems, even up to the last minute. So we're very thankful for that. And we hope in return that you really enjoyed the course, and it was really fun. So looking forward to the course evaluations.

So just want to tell you a little bit about some opportunities ahead. I've passed out these brochures for the cell broadband engine challenge, Beyond Gaming. And this is a IBM sponsored event, where you really can compete in two different challenges, and in one of them you can win really seriously cool t-shirts. That's actually lifted directly from the online link.

So the competition starts February 5 at midnight. And you have to pass an online quiz, of which I expect all of you should be able to pass. And hopefully, you will compete and at least get a seriously cool t-shirt.

The second challenge, which is potentially more interesting, just because there's a \$10K grand prize-- there's also a \$7K second prize, and some serious money for at least three or four prizes. You can look at information in the brochures. According to the information, you'll find it requires some serious coding skills on your part. But I certainly expect all of you to be able to be well primed at this point, especially since you've learned about cell hands on, and you've discovered all the pitfalls on your own. It would make for a very good competition on your part.

There are different categories. Sorry, it's three categories, not four. Application solutions-- so some of things, some of the people have done more application oriented thing could fit, or you can sort of take what you've learned, apply it to

financial services if you have interest in that, medical imaging, electronic design, automation, things of that sort. Operating systems-- I'm not sure if that's particularly relevant to a lot of people here. I'm not sure if that's in their interest area, but programmability. So certainly the streaming framework that one of the software radio projects tried to do would fit onto that, some of the work that the Ray Tracer team did, in terms of coming up with their own interface for graphics could certainly fit.

So I urge you to consider competing in these. There's probably a lot of fame and fortune to be had here.

So we had our own competition. And what you're going to get are some seriously cool trophies, since we don't have t-shirts. So Mary was very-- could have had t-shirts. I didn't want to compete with IBM directly.

So for the winning team, you will get this seriously awesome looking trophy, which has a little imprint on the front that says first place, 6.189. And you're also going to get a \$150 gift certificate, I think we announced this at the beginning of the course.

I'm also working with people at IBM on arranging a one day trip to IBM T.J. Watson Research Center, for the winning team to present their winning project, do a demo, and then meet with people at IBM who are doing really cool, interesting research. And it should be a fun day. And certain people at IBM have been very excited about hearing what's going on in this project, in this class. And so it'll be a good, fun opportunity, I think, all around.

OK, so I'm going to work my way up to the first prize. I think in terms of the complexity of the project handled, certainly Speech Synthesis probably took on the most complex-- certainly in terms of the software that they used, and then maybe that bogged them down a little. So there's probably something to be said in terms of starting from scratch versus taking complex infrastructure and re-engineering it for parallelism. I think you've discovered firsthand how hard that really is.

And this is a big problem for parallel computing. There's a lot of legacy software out there that eventually might have to be ported to parallel architectures. How do you do it? You pointed out, code is not well documented. Tools are lacking. So what do you do? So you've stumbled on a really seriously important problem facing a lot of people in the industry.

The most synchronization issues. We believe the guys who are doing the Battery Simulations and modeling sort of the chemical reactions certainly ran into a lot of synchronization issues, just because of the dependent nature of the computation.

Next up on the list would be for the most parallel programming challenges. So not only did they run into issues with synchronization, but certainly discovered problems with races. And I think they're the only team who have successfully hung their PlayStation 3 several times, and required a reboot quite a few times.

OK. So next, best effort awards. These guys should really be highlighted, because they worked largely on their own. Is that true?

Yes.

Yeah, and that's certainly true. And there was certainly a lot of people who were impressed by the Global Illumination stuff yesterday, and sort of mentioned that. And what I'm hoping to do is take the judges' feedback and sort of summarize that for each team, so you can have some constructive criticism back that might be helpful. Molecular Dynamic Simulation work that you heard about today, I think certainly a valiant effort on his part, as well.

The most complete project, I think this would probably be Backgammon Tutor's project. I think in terms of scope it was well defined, in terms of what they actually completed. I think they came out with a really cool game. My money was on them all along to actually win the first prize.

But I think the Ray Tracing team actually blew everybody away with their demo. And I think they were a clear winner. They really tackled sort of their paralyzation, descendizing. They had a really cool frame buffer demo, so they figured out how to

actually write to the frame buffer and do that simulation, or do the graphics rendering. And I think some mumbling about a real cool demo that they've gotten working overnight. So we'll try to set up over in [? Stoddart, ?] where we have pizza, and you guys can take a look at that.

So with that, I'll hand out the certificates and the awards offline. But you've at this point been Cell-ified. And the cake is in the back says, Congratulations on your Cell-ification. So--

Resistance is futile.

That's right. So thanks a lot for taking the course. I think we've learned a lot as instructors. I'm hoping to do this again with Saman next year, next IAP, and maybe eventually turn it into a regular semester course. I think there's a lot of things we can do better, and hopefully you've told us some ideas of how to do that. So with that, thanks, and start enjoying cake in the back.